TMBP

... An Investment in the Future of Tennessee Cities

TENNESSEE MUNICIPAL BENCHMARKING PROJECT

FY2018 Annual Report

Report prepared by:

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April 2019

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INSTITUTE FOR PUBLIC SERVICE

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Acknowledgements

Throughout the FY2018 cycle, the TMBP Steering Committee provided the leadership needed to keep things moving forward. A special thank you to Jay Evans, Assistant City Manager of Brentwood, for serving as our Steering Committee Chair from 2017 to 2019.

The members of the FY2018 steering committee are:

Athens, Seth Sumner, City Manager
Bartlett, Dick Phebus, Finance Director
Brentwood, Jay Evans, Assistant City Manager
Bristol, Bill Sorah, City Manager
Chattanooga, Brian Smart, Manager of Financial Operations
Franklin, Michael Walters Young, Budget & Strategic Innovation Manager
Johnson City, Pete Peterson, City Manager
Kingsport, Judy Smith, Budget Officer
Knoxville, Russ Jensen, Director of 311
Lewisburg, Randall Dunn, City Manager
Morristown, Larry Clark, Assistant City Manager
Spring Hill, Chuck Downham, Assistant City Administrator

Additional gratitude goes to the awesome city staff members who serve as the data coordinators for each member city. These city staff members collect the data, enter the data, and repeatedly review the data to ensure the accuracy of their city's information. This task is critical to the integrity of the overall data provided by TMBP.

Acknowledgements (cont.)

The FY2018 data coordinators are:

Mike Keith, City of Athens; Dick Phebus, City of Bartlett; Jay Evans, City of Brentwood; Mary Lee Williams, City of Bristol; Fredia Forshee, City of Chattanooga; DeAnn Kraft, City of Franklin; Lora Wright, City of Johnson City; John Morris, City of Kingsport; Russ Jensen, City of Knoxville; Donna Park, City of Lewisburg; Larry Clark, City of Morristown; and Chuck Downham, City of Spring Hill.

This program would not be able to provide the unique assistance that it does without the MTAS staff who provide expertise, advice and guidance to the project:

Rex Barton, Police Management Consultant (Police)
Angie Carrier, Management Consultant (General)
Steve Cross, Fire Management Consultant (Fire)
Al Major, Finance and Accounting Consultant (Finance and general advice)
Warren Nevad, Management Consultant (Parks and Recreation assistance)
Justin O'Hara, IT Consultant (IT)
Honna Rogers, Management Consultant (Planning and Zoning)
Sharon Rollins, Technical Consulting Team Program Manager (Refuse and Recycling)
Richard Stokes, HR Consultant (HR and Benefits)
John Grubbs, HR Consultant (HR and Benefits)
Dennis Wolf, Fire Management Consultant (Fire)

Note: A complete list of the current members as well as a history of city participation in the TMBP is available in the appendix of this report.

Introduction

This report marks the seventeenth year of the Tennessee Municipal Benchmarking Project (TMBP). This year's annual report provides performance data for the period July 1, 2017 through June 30, 2018 (Fiscal Year 2018 or FY2018) and continues our practice of comparing data over a three-year period for selected benchmarks.

Data were collected in a total of eleven service areas: building code enforcement, employment benefits, finance services, fire services, human resources, information technology, parks and recreation, planning and zoning, police, property maintenance code enforcement, and refuse and recycling. Due to wide variations in the reporting of planning and zoning data again for FY2018, this service area is not represented in the report. Members and MTAS continue to work on what is the most useful and meaningful planning and zoning data to collect.

The FY2018 data cycle was our fifth year using the Pentana Performance management product (formerly Covalent). For this data cycle, Pentana was open to members for data entry on September 1, 2018 and the system was closed to data entry on October 31, 2018.

Presentation of the Data in Annual Report

Charts in FY2018 Report

As with last year's report, we have created one chart per selected benchmark to display all members for a three-year period compared to the average and median on each chart. Blanks in the chart mean that no data was provided, or the city entered N/A (not applicable) for that value. Entering N/A as the value means the city does not collect that data.

Our goal is to continue to refine the report making it easier to read, digest, and act on as needed. Members can request custom reports and charts that are not provided in the Annual Report. Additionally, prepared reports and charts are made available on the Pentana member portal for downloading on demand.

Types of Benchmarks

TMBP benchmarks are presented using four classifications of performance measures: workload, resource, efficiency, and effectiveness measures. Presenting benchmarks in these categories makes the data more applicable to the decision-making process that managers are engaged in on a daily basis.

- **Workload measures** demonstrate the amount of work performed or number of services received by customers and clients. They are basic measures of what work is being done but not how well or efficiently it is done.

  Example: police calls for service per 1,000 population.

- **Resource measures** track the amount of inputs and resources local governments allocate to their given service areas. Whereas efficiency measures gauge how cost-effective programs are in using resources to provide a given service, resource measures are more basic, tracking how much of a resource is allocated.

  Example: refuse full-time equivalents per 1,000 population.

- **Efficiency measures** capture the relationship between work performed and the amount of resources expended in performing the work. It is common to see these measures expressed as cost per unit produced or performed. Efficiency measures often entail the cost effectiveness of service delivery.

  Example: fire cost per call for service.

- **Effectiveness (outcome) measures** indicate the quality or successfulness of work performed. They are tied to goals or targets established by agencies to achieve desired standards or results.

  Example: fire department response time.

How TMBP Data is Analyzed

Averages and Median in TMBP Data

As has been stressed throughout the existence of the TMBP, the averages and medians are calculated for the group of cities participating in the project that year. Medians were introduced in the FY2017 report as a way to address concerns about data outliers skewing the averages for the group. The median is simply a midpoint in all of the values when they are listed in order.

Having both the median and the average to contemplate gives members an even better foundation for understanding what the numbers are "saying."

Exclusion of Selected Data from Average Calculations

At times, we have chosen to exclude individual data from the calculation of the average and median for a particular benchmark measure. In these cases, a note of explanation is provided in the report. Examples of reasons to exclude data include:

- Cost benchmarks are calculated from total costs reported per service area. Some cities have one department that provides multiple services and are not able to separate the costs for the different service areas. For example, the combining of building code enforcement and property maintenance code enforcement costs or refuse and recycling FTEs. In these cases, this data is excluded from the calculation of the average and median calculations.
- In a few cases, benchmark values for individual members are such extreme outliers that they would significantly impact the validity of the average. In these cases, when attempts to obtain revised numbers were unsuccessful, these numbers were

excluded from the averages.

- In rare cases, members have asked us to specifically exclude a value from the average calculation due to special circumstances related to that service measure.

Multi-year Comparisons

In addition to comparing members to the average and median, we also look at those benchmarks over a three-year period. The principal diagnostic value of a multi-year comparison is that it enables managers to track and compare their own jurisdiction's performance over time and facilitates an assessment of which aspects of services are moving in the desired direction.

Each city is unique and experiences different circumstances or events that affect inputs and outputs. Trend analysis among the members can provide a catalyst to investigate the methods, practices, or strategies employed by member cities. Determining why a city compares more favorably to its benchmarking peers, and endeavoring to understand the potentially better method or practice, is at the heart of the benchmarking effort.

Cost Measures

In order to measure the use of resources and the efficiency of service delivery, cost information must be considered. TMBP's selection of cost measures was originally based on a recommended chart of accounts for municipalities created by the state of Tennessee. Members are asked to provide **actual** costs, not **budgeted** costs. Additionally, we encourage members not to wait on their audits to be completed before providing their cost data.

Four types of cost data:

- **Personnel service costs** include the salaries and benefits paid to those who provide the service. Full-time and part-time personnel are considered in this cost area.
- **Direct operating costs** are costs that can be directly allocated to a department and represent the most basic operating costs.
- **Indirect costs,** sometimes called 'overhead', may be budgeted in another department and must be allocated to the service department.
- **Depreciation costs** capture the loss of value to the department from the aging of its buildings, equipment, and other capital assets. It is calculated by allocating an equal portion of the acquisition cost of the asset over the useful life of the asset.

Fundamental Challenge of Municipal Services Benchmarking

MTAS and TMBP members work diligently to ensure that the data reported are based on accurate and comparable cost and service data. However, every city faces a different service environment and varying community priorities. After all, the job of cities is to be responsive to the service demands of their communities, not to strive for comparability with other cities.

While we have made every attempt to account for the differences in service delivery systems among our member cities, we acknowledge that variations remain and should be taken into account when reviewing the comparison charts.

To that end, each service area section introduction provides a "Things to Consider" discussion with a list of influencing factors related to the delivery of that particular service. Each comparison chart should be interpreted in light of these influencing factors.

Additionally, to help illustrate some community differences between member cities that most likely have impacts on service levels, we provide charts which compare member cities on selected **demographic** variables that we have selected. Those charts are provided in *Appendix A. Member Demographics*.

As has been mentioned throughout this introduction, we emphasize that the information provided in this report should serve as a **starting point in the conversation** of performance management, not the **end of the conversation**.

BUILDING CODE ENFORCEMENT SERVICES MEDIANS FOR FY18

THINGS TO CONSIDER:

Code Enforcement (Building Codes, Property Maintenance, Planning & Zoning) functions are managed differently from city to city; some are integrated into a single department, while others have separate departments for each function.

This explains some of the differences in the data reported although any true outliers have been excluded from the group averages and medians.

Other influencing factors in this service area include:

- Number of FTEs devoted to inspections
- Number of trade inspectors
- Rate of new construction activity in the community
- Different versions of building codes adopted

The number of inspections per FTE **1453.50**

$71.60 is the cost per inspection

The cost per permit issued is **$363.05**

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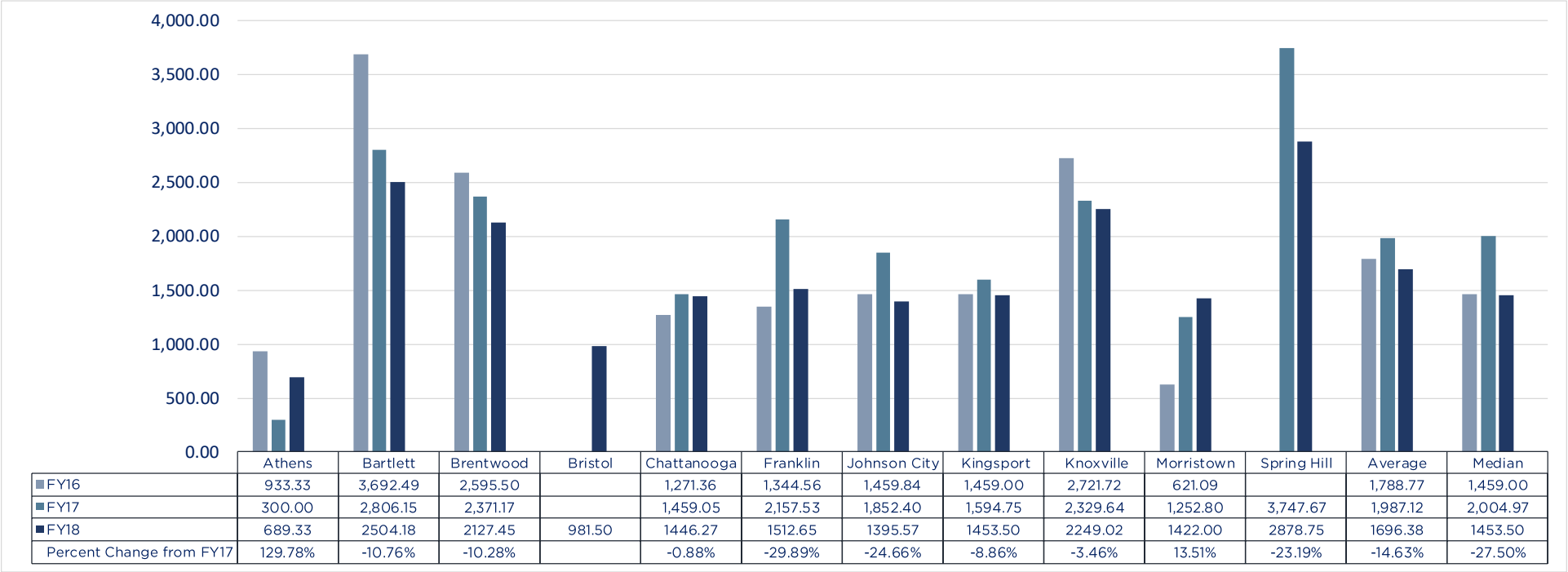
TENNESSEE MUNICIPAL BENCHMARKING PROJECT

ALSO IN THIS SECTION:

- Revenue generated per permit issued
- Cost per capita

Building Code Enforcement Services

Building Inspections per Inspector FTE — Workload Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	933.33	3,692.49	2,595.50		1,271.36	1,344.56	1,459.84	1,459.00	2,721.72	621.09		1,788.77	1,459.00
FY17	300.00	2,806.15	2,371.17		1,459.05	2,157.53	1,852.40	1,594.75	2,329.64	1,252.80	3,747.67	1,987.12	2,004.97
FY18	689.33	2504.18	2127.45	981.50	1446.27	1512.65	1395.57	1453.50	2249.02	1422.00	2878.75	1696.38	1453.50
Percent Change from FY17	129.78%	-10.76%	-10.28%		-0.88%	-29.89%	-24.66%	-8.86%	-3.46%	13.51%	-23.19%	-14.63%	-27.50%

Bartlett, Brentwood, and Knoxville show a decrease in the inspections per FTE corresponding to a general decrease in the average and the median.

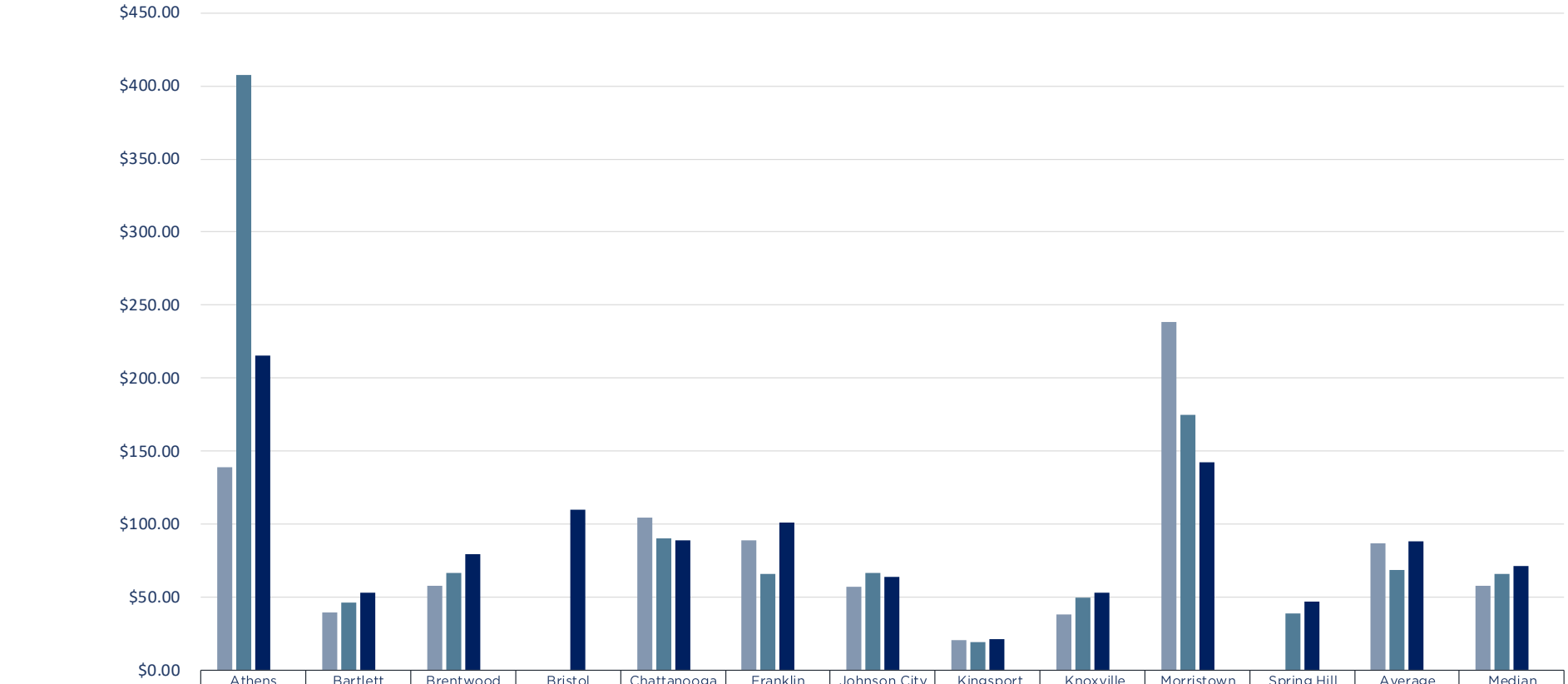
Morristown shows an increase in inspections per FTE due to improved tracking of inspections.

Spring Hill is included in the average and median.

Pentana PI code: P.BC037f

Building Code Enforcement Services

Total Cost per Building Inspection — Efficiency Benchmark



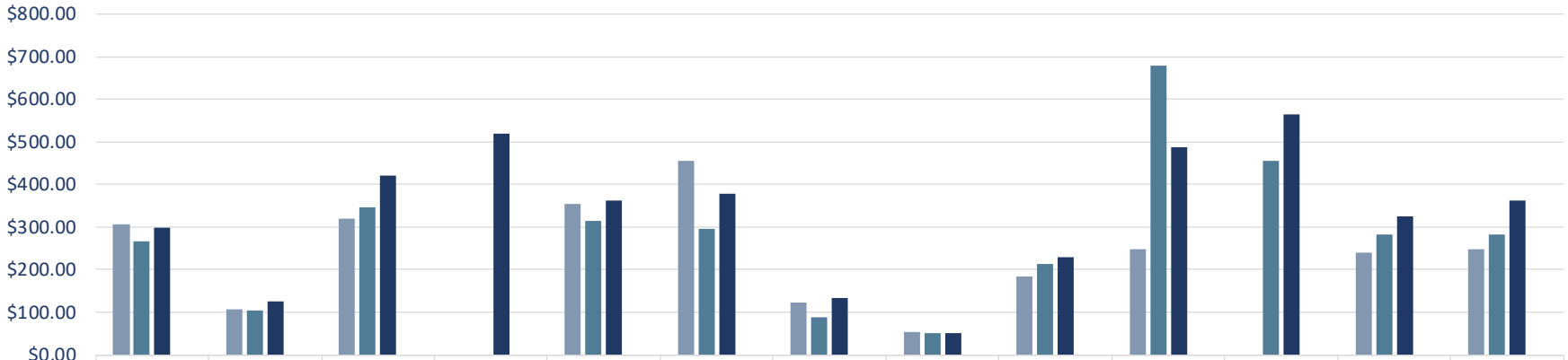
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	$138.99	$39.78	$57.83		$104.62	$88.63	$57.28	$20.29	$38.32	$238.40		$87.13	$57.56
FY17	$407.74	$46.57	$66.75		$90.44	$66.11	$66.57	$19.30	$49.96	$175.12	$38.91	$68.86	$66.11
FY18	$215.50	$52.94	$79.34	$109.74	$88.98	$100.87	$63.85	$20.95	$52.83	$142.37	$46.87	$88.57	$71.60
Percent Change from FY17	-47.15%	13.68%	18.86%		-1.61%	52.58%	-4.09%	8.55%	5.74%	-18.70%	20.46%	28.62%	8.30%

Athens is excluded from the average and the median for FY2017.

Pentana PI code: P.BC038f

Building Code Enforcement Services

Building Enforcement Cost per Permit Issued — Efficiency Benchmark

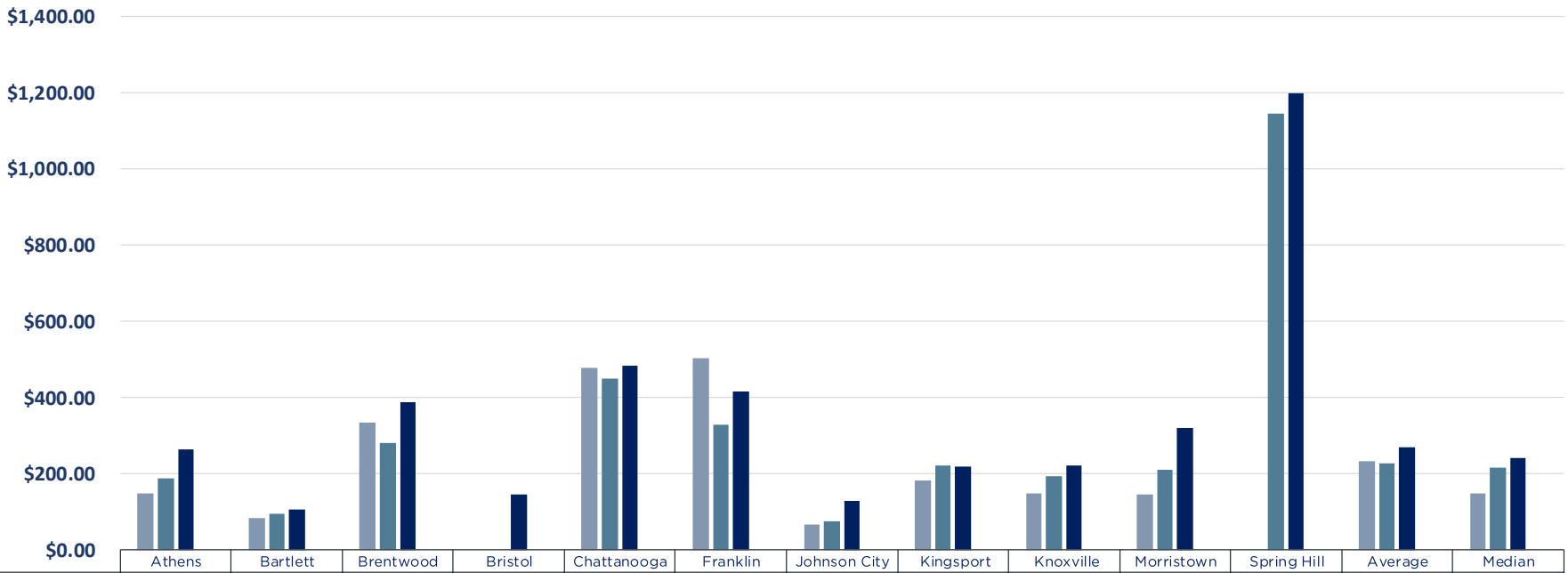


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	$305.95	$105.58	$319.61		$354.62	$454.26	$123.42	$53.56	$184.64	$249.04		$238.96	$249.04
FY17	$267.47	$103.41	$345.82		$315.71	$294.95	$89.19	$52.08	$213.37	$678.80	$455.73	$281.65	$281.21
FY18	$297.89	$124.13	$420.62	$518.48	$363.05	$378.78	$133.04	$51.61	$230.04	$486.20	$565.73	$324.51	$363.05
Percent Change from FY17	11.4%	20.0%	21.6%		15.0%	28.4%	49.2%	-0.9%	7.8%	-28.4%	24.1%	15.2%	29.1%

Pentana PI code: P.BC035.1f

Building Code Enforcement Services

Revenue per Building Permit Issued — Efficiency Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	$149.05	$85.00	$334.72		$478.83	$503.61	$66.53	$184.02	$149.02	$146.33		$233.01	$149.05
FY17	$187.36	$94.63	$282.02		$449.82	$329.65	$76.02	$222.93	$194.44	$209.72	$1,146.85	$227.40	$216.33
FY18	$265.26	$106.43	$388.47	$146.49	$484.47	$415.89	$128.71	$218.51	$221.09	$319.48	$1,198.34	$269.48	$243.18
Percent Change from FY17	41.58%	12.47%	37.75%		7.70%	26.16%	69.31%	-1.98%	13.71%	52.34%	4.49%	18.51%	12.41%

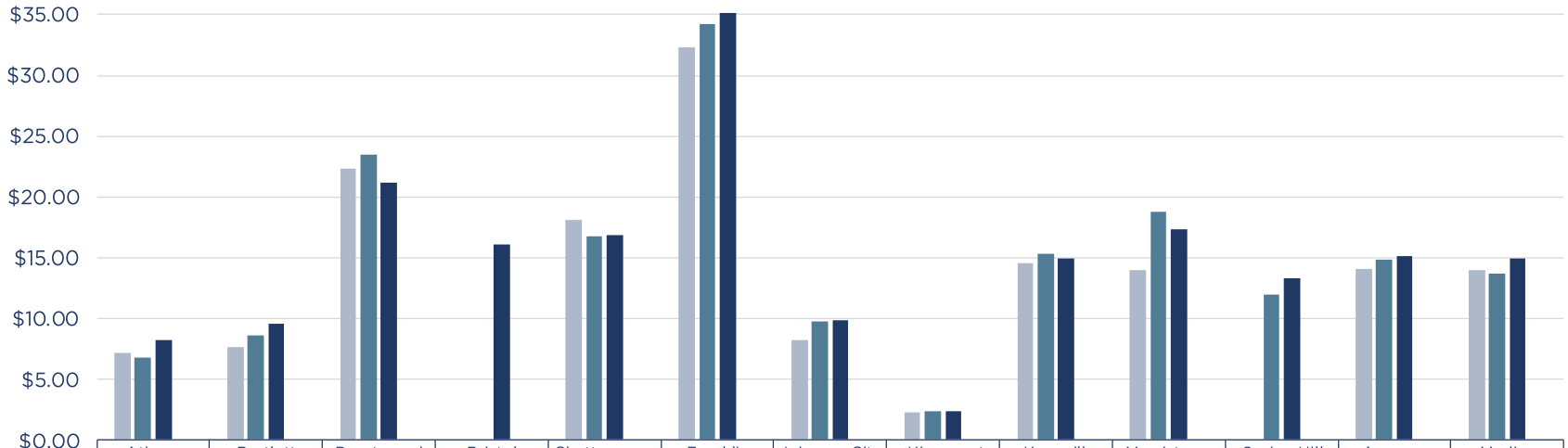
Some substantial increases in the revenue per permit from FY17 to FY18 in Athens, Johnson City and Morristown. These increases are reflected in the overall increase in the average and the median for this measure for FY18.

Spring Hill is not included in the average or median.

Pentana PI code: P.BC036.1f

Building Code Enforcement Services

Building Code Enforcement Program Cost per Capita — Efficiency Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	$7.23	$7.62	$22.29		$18.09	$32.32	$8.28	$2.31	$14.58	$13.97		$14.08	$13.97
FY17	$6.82	$8.65	$23.50		$16.74	$34.20	$9.76	$2.40	$15.34	$18.82	$11.98	$14.82	$13.66
FY18	$8.28	$9.55	$21.15	$16.14	$16.88	$36.58	$9.87	$2.38	$14.91	$17.37	$13.35	$15.13	$14.91
Percent Change from FY17	21.4%	10.4%	-10.0%		0.8%	7.0%	1.1%	-0.8%	-2.8%	-7.7%	11.4%	2.1%	9.2%

Franklin is included in the average and median.

Pentana PI code: C.BC067f

THINGS TO CONSIDER:

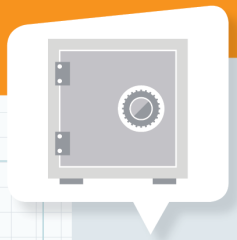
Employment Benefits are viewed as part of the total compensation received by an employee in exchange for performance of their duties.

It is important to note, that cities vary in how payroll, risk management, and other functions are allocated between their Finance, Human Resources, and other internal service delivery departments.

Human Resources functions are largely internal aspects of municipal service delivery. Performance measures include, but are not limited to, employee staffing levels, employee turnover and recruitment, employee retention, and employee training.

Also note that cities report variations in whether certain functions, namely risk management and payroll, are included in their Human Resources or Finance Departments. It is important to recognize the variations in allocation of such functions when interpreting FTE and personnel cost figures.

HUMAN RESOURCES & EMPLOYEE BENEFITS SERVICES MEDIANS FOR FY18



42.85% The benefit to salary ratio for all funds

The city-wide personnel cost per FTE **$75,615.76**

$993.31 The city-wide Human Resources cost per FTE

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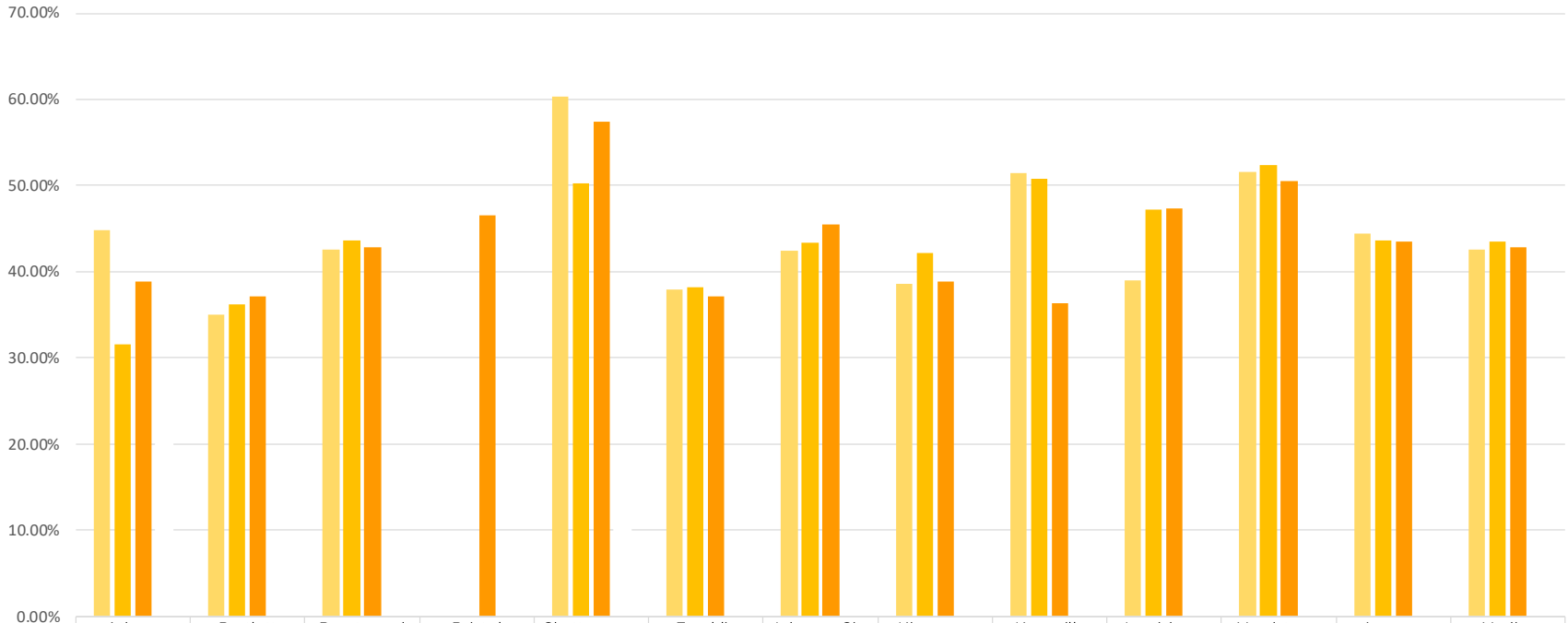
TENNESSEE MUNICIPAL BENCHMARKING PROJECT

Employment Benefits Services

Benefit to Salary Ratio All Funds — Resource Benchmark

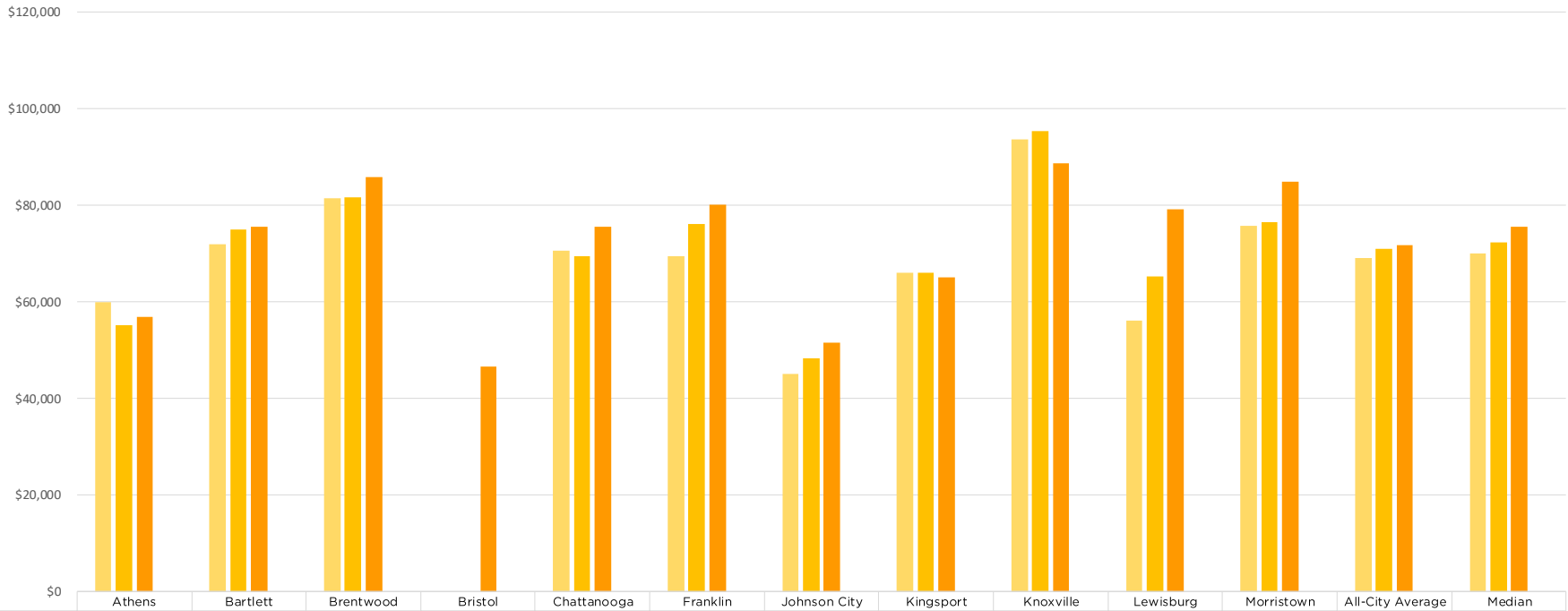


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Average	Median
FY16	44.80%	35.01%	42.59%		60.35%	37.98%	42.45%	38.63%	51.39%	38.98%	51.55%	44.37%	42.52%
FY17	31.56%	36.24%	43.69%		50.20%	38.26%	43.38%	42.11%	50.81%	47.22%	52.37%	43.58%	43.54%
FY18	38.80%	37.16%	42.85%	46.50%	57.40%	37.15%	45.50%	38.89%	36.28%	47.30%	50.50%	43.48%	42.85%
Percent Change from FY17	22.94%	2.54%	-1.92%		14.34%	-2.90%	4.89%	-7.65%	-28.60%	0.17%	-3.57%	-0.23%	-1.57%

Pentana PI code: C.BF046f

Employment Benefits Services

City-wide Personnel Costs per FTE — Resource Benchmark

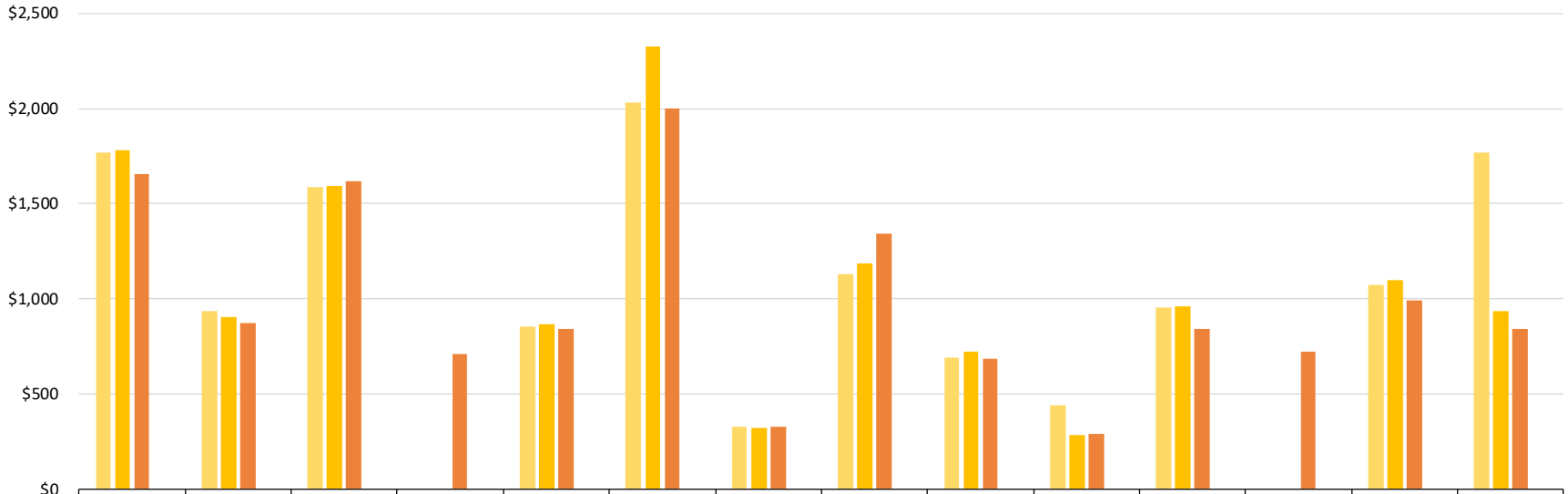


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	All-City Average	Median
FY16	$59,949.89	$72,056.43	$81,431.69		$70,606.57	$69,514.78	$45,040.60	$65,983.85	$93,624.88	$56,150.89	$75,863.43	$69,022.30	$70,060.68
FY17	$55,233.18	$75,064.92	$81,736.87		$69,580.66	$76,076.64	$48,318.80	$66,005.83	$95,429.63	$65,244.12	$76,493.23	$70,918.39	$72,322.79
FY18	$56,978.21	$75,615.76	$85,816.25	$46,635.77	$75,509.81	$80,251.77	$51,572.59	$65,101.41	$88,692.93	$79,146.63	$84,880.87	$71,836.55	$75,615.76
Percent Change from FY17	3.16%	0.73%	4.99%		8.52%	5.49%	6.73%	-1.37%	-7.06%	21.31%	10.97%	1.29%	4.55%

Pentana PI code: P.BF071f

Human Resource Services

Human Resource Cost per Total FTE (City-Wide) — Resource Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$1,769.51	$936.45	$1,584.11		$856.80	$2,028.70	$328.43	$1,126.57	$689.10	$439.64	$955.35		$1,071.47	$1,769.51
FY17	$1,782.05	$904.99	$1,595.26		$867.03	$2,325.32	$322.19	$1,184.54	$722.17	$286.03	$961.08		$1,095.07	$933.04
FY18	$1,652.56	$873.14	$1,619.60	$710.37	$843.05	$2,003.25	$328.98	$1,345.14	$683.86	$290.26	$844.12	$725.35	$993.31	$843.59
Percent Change from FY17	-7.27%	-3.52%	1.53%		-2.77%	-13.85%	2.11%	13.56%	-5.30%	1.48%	-12.17%		-9.29%	-9.59%

Pentana PI code: P.HR026f

THINGS TO CONSIDER:

Finance services generally consist of long and short term budgeting, debt-issuance, accounting, and financial reporting and record-keeping.

In many cities, it involves tax collections, payment services and purchasing, and investment of city funds.

These functions encompass those activities which are related to financial management, control, and monitoring for the city.

Cities vary in how payroll, risk management, and other functions are allocated between their Finance, Human Resources, and other internal service delivery departments.

FINANCIAL SERVICES
MEDIANS FOR FY18

1.72% Percent of purchases made using P cards

Utility collections as percentage of all billed **97.51%**

97.88% Property tax collections as percentage of all billed

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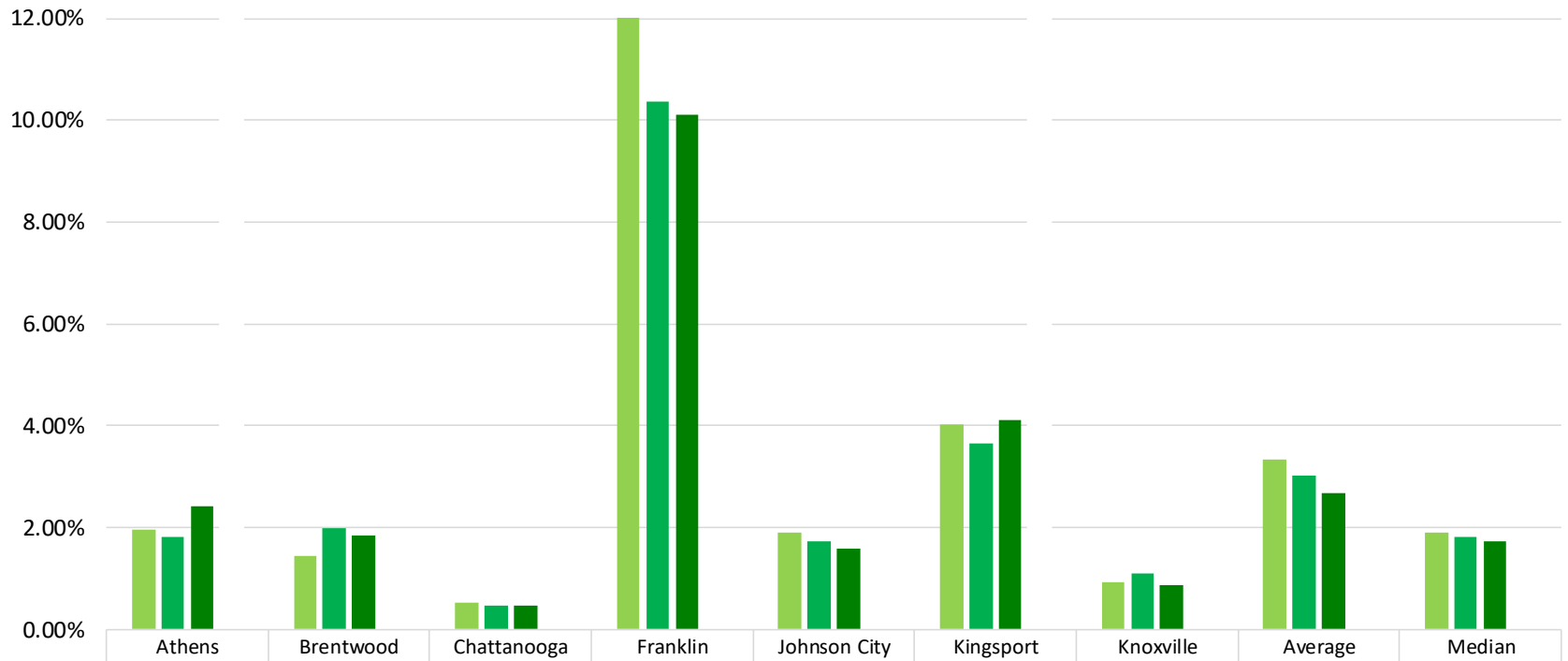
ALSO IN THIS SECTION:
- Structure & Functions of Finance Department
- "Bad Check" collection techniques

Financial Services

P-Card Purchasing Volume as a Percent of Total Purchasing Volume — Efficiency Benchmark



	Athens	Brentwood	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Average	Median
FY16	1.95%	1.45%	0.51%	12.50%	1.91%	4.03%	0.93%	3.33%	1.91%
FY17	1.80%	1.98%	0.46%	10.36%	1.72%	3.65%	1.10%	3.01%	1.80%
FY18	2.41%	1.85%	0.46%	10.12%	1.58%	4.10%	0.87%	2.68%	1.72%
Percent Change from FY17	34%	-7%	0%	-2%	-8%	12%	-21%	-11%	-5%

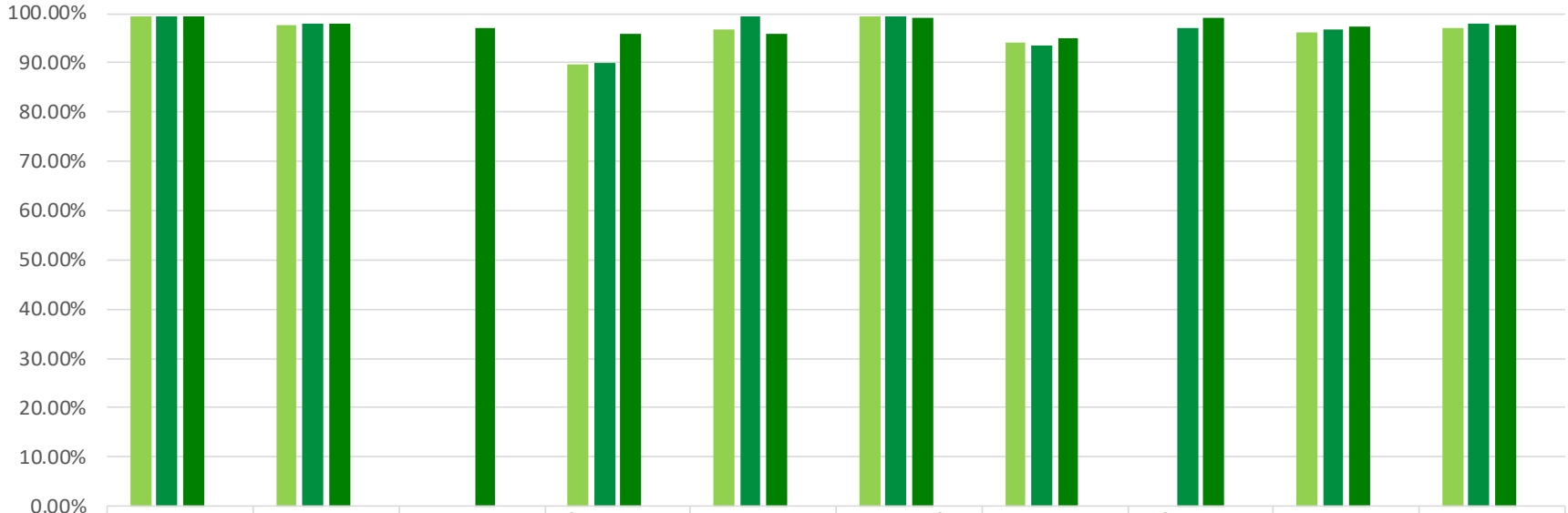
An overall decrease in this measure could be related to an overall decrease in the total purchasing volume from FY17 to FY18. Comparison chart is available upon request.

Franklin is included in the average and median.

Pentana PI code: P.FN032f

Financial Services

Collections as Percent Billed (Utilities) — Effectiveness Benchmark



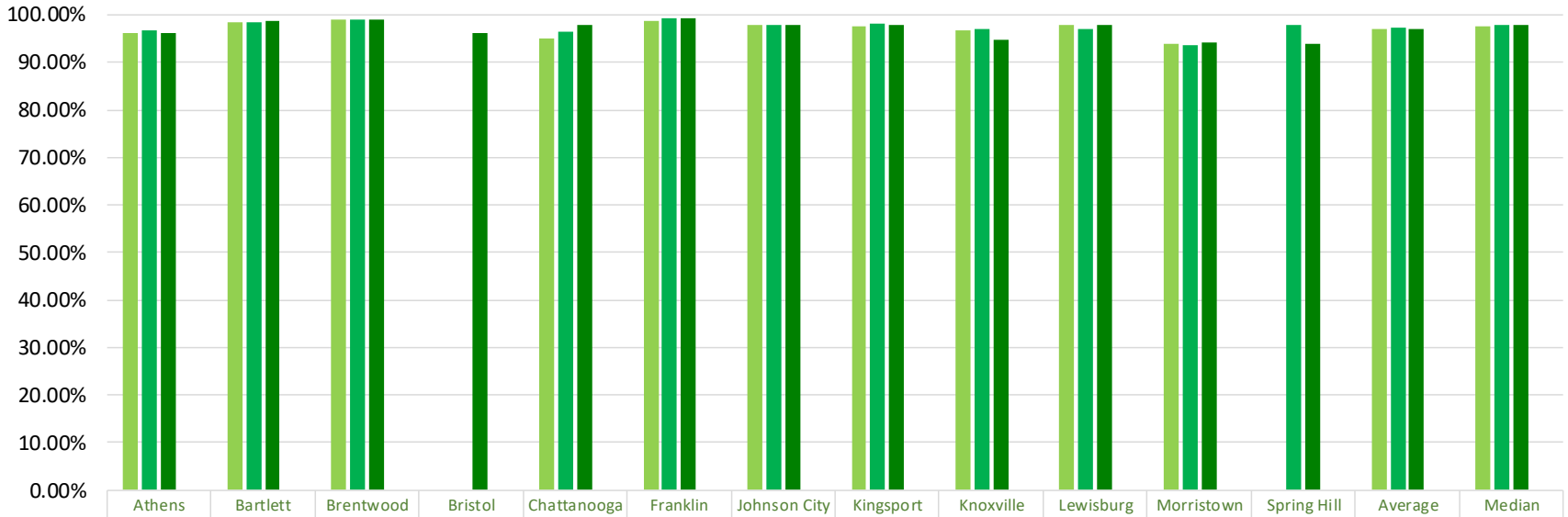
	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Spring Hill	Average	Median
FY16	99.50%	97.60%		89.80%	96.70%	99.49%	94.04%		96.19%	97.15%
FY17	99.50%	98.00%		90.00%	99.40%	99.50%	93.50%	97.00%	96.70%	98.00%
FY18	99.50%	98.00%	97.01%	95.82%	96.00%	99.00%	95.10%	99.00%	97.43%	97.51%
Percent Change from FY16	0%	0%		6%	-3%	-1%	2%	2%	1%	-1%

Athens, Knoxville, Lewisburg and Morristown do not report this data.

Pentana PI code: P.FN020

Financial Services

Collections as Percent Billed (Property Tax) — Effectiveness Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	96.04%	98.31%	99.00%		95.10%	98.65%	98.00%	97.50%	96.78%	97.80%	93.88%		97.11%	97.65%
FY17	96.83%	98.38%	99.00%		96.43%	99.26%	98.00%	98.02%	97.10%	97.00%	93.50%	98.00%	97.41%	98.00%
FY18	96.03%	98.61%	99.00%	96.10%	97.84%	99.21%	98.00%	97.92%	94.87%	98.00%	94.28%	94.00%	96.99%	97.88%
Percent Change from FY2017	-0.83%	0.23%	0.00%		1.46%	-0.05%	0.00%	-0.10%	-2.30%	1.03%	0.83%	-4.08%	-0.43%	-0.12%

Pentana PI code: P.FN021

Structure and Functions of Finance Departments

City	Finance Department Functions	Contracted Finance Functions
Athens	Tax collections, A/P, commercial refuse billing, business licenses, payroll processing, financial statements, annual budget	None
Bartlett	Finance department is responsible for accounting, reporting, payroll, purchasing, tax collections and utility billing and collection operations. Also responsible for CIP budget, bond and capital note issuance, payment of all debt principal and interest when due. Develop annual CAFR and budget documents; submit CAFR and Budget to GFOA for awards program. Billing and receipt of miscellaneous property maintenance charges, maintain data on all PILOT properties approved by the City of Bartlett Industrial Development Board	Printing of property tax notices is outsourced to private firm. Investment of Pension assets managed by professional investment firm with guidance from City of Bartlett Pension Board. Delinquent utility billing turned over to professional collection agency after 180 days. City contracts with independent audit firm for annual CAFR, architects and engineers for road and bridge construction and maintenance and other contract services over $50,000. Financial adviser and bond counsel for bond and note issuance is contracted on yearly basis.
Brentwood	Utility Billing and Collections, Purchasing, Fixed Asset Management and Asset Disposal, Fuel Inventory, Business Licenses/Peddler Permits, Fleet Compliance	Printing and mailing annual property tax notices and monthly utility bills. Lockbox for property tax, utility bills and court fines. Financial advisor for bond issues. Actuary used for other post employment benefit cost calculations.
Bristol	The Finance Department performs accounting, accounts payable, accounts receivable and invoicing, budgeting, business licensing, debt management, forecasting, investing, municipal court clerk, payroll, property tax, records, and utility billing functions. Staff also performs accounting related functions for two separate related entities. Purchasing is performed by the Administration Department.	
Chattanooga	Treasury, City Court, accounting, budgeting, payroll, and accounts payable	Financial Advisor, Bond Counsel, Arbitrage calculations and reporting, Lock Box, Sewer Billing, Property Tax bill printing.

Structure and Functions of Finance Departments (cont.)

City	Finance Department Functions	Contracted Finance Functions
Franklin	Disbursement of funds (vendor & employee payments), Payroll (not retiree payments), Budgeting, Financing (bond issuance), Use of Funds (investments), Bank Reconciliation, Audit (thru External Auditor), Regulatory Reporting (CAFR), Management Reporting, Financial Analysis, Benchmarking; Receipt of monies is in another division (Revenue Mgmt); Purchasing is a separate division	The main contracted function is the External Audit (currently performed by Crosslin & Associates, CPA.). Other contracted functions include Financial Advisor (PFM), Pension Actuary and Bond & Pension Special Counsels. Note that with the shift of Franklin's Pension Assets to TCRS, the role and cost of the Pension Actuary & Legal Counsel has been reduced.
Johnson City	Payroll is a function of the Finance Department	N/A
Kingsport	Finance, accounting, payroll, records management (City Clerk), and utility billing and collections	N/A
Knoxville	A/P, A/R, Purchasing, Mail, Property Tax billing/collection, Accounting, Treasury Management Payroll, Real estate property acquisition	Lock Box
Lewisburg	Accounts Payable, Accounts Receivable, Payroll, Property Tax Collections, Grants, and all things related to Financial Operations	N/A
Morristown	Accounting, Payroll, Accounts Payable and Cash Collections	N/A
Spring Hill	Mailing and receiving of utility bills; Receiving property tax bills; accounts payable; reconciliation of all receipts to GL and bank accts; processing all purchase orders; payroll; budget preparation	N/A

Source: Department descriptions as entered into Pentana by TMBP members.

Pentana PI Code: P.FN029

“Bad Check” Collection Techniques Reported by Members

Athens	File warrant if not paid within 10 days.
Bartlett	For realty payments, a phone call made to homeowner, add $20 fee; Send letter to customer, reverse payment in accounting software system, charge $20 fee. For utility service, reverse payment and phone call to customer. Two returned checks within six month period will place customer on cash only for next six months.
Brentwood	Notice is sent out with statement for amount owed plus $25.00 NSF fee.
Bristol	Customers with more than one bad check in a year will not be able to pay with a check for a one year period. Only cash payments will be accepted. If the balance remains unpaid, the amount owed will also be turned over to a collection agency dependent upon the type of revenue. Utility accounts are subject to termination and property tax accounts can be pursued through other legal actions.
Chattanooga	The bank runs the check 2 times prior to returning to us. We notify the department to recollect the funds. When the department recollects the funds, they also collect the returned check amounts, dependent upon the amount of the check.
Franklin	1) City receives notice from bank that a bad check/draft has occurred; 2) process reversal; 3) add $20 fee; 4) notify issuer to honor (cash, money order, cashiers check); 5) should the check not be honored, follow actions above based on function applied; 6) are forwarded to collections agent if not honored; 7) reverse credit applied to account.
Kingsport	A demand letter / bill is created which includes the amount of the bad check plus a 30 NSF Check Fee. The bill is sent via Certified Mail allowing approximately 30 days to pay. These accounts are reviewed monthly. Any NSF accounts remaining unpaid past the due date are forwarded to our third party collection agency.
Knoxville	Electronic recovery attempted by outside vendor. Uncollected are charged back against taxes with fees.
Lewisburg	A certified letter is sent to the owner of the bad check. Last effort is taking to court.
Morristown	A certified letter is sent with notification of the return check and allowance of 10 days for the return check to be paid with a $20 fee. If not paid the debt is filed with General Sessions court and a warrant is issued for collection.
Spring Hill	A letter is sent requesting payment for check and a $25.00 service charge.

Source: Department descriptions as entered into Pentana by TMBP members.

Pentana PI Code: P.FN028

FIRE SERVICES
MEDIANS FOR FY18

THINGS TO CONSIDER:

Data collected in this service area cover the entire range of services provided by the city's fire department, which may include fire suppression, fire prevention, fire code inspections, fire safety education, arson investigation, rescue, and/or emergency medical services.

A special caution to the reader is appropriate for fire services benchmarks because there is considerable variation in how these services are provided.

Emergency medical services provided by Fire Departments vary from city to city.

$204.77 The cost per capita for fire services

Total cost per call for service **$2057.52**

00:05:48 The median, average response time

Percentage of structure fires with the cause determined **61%**

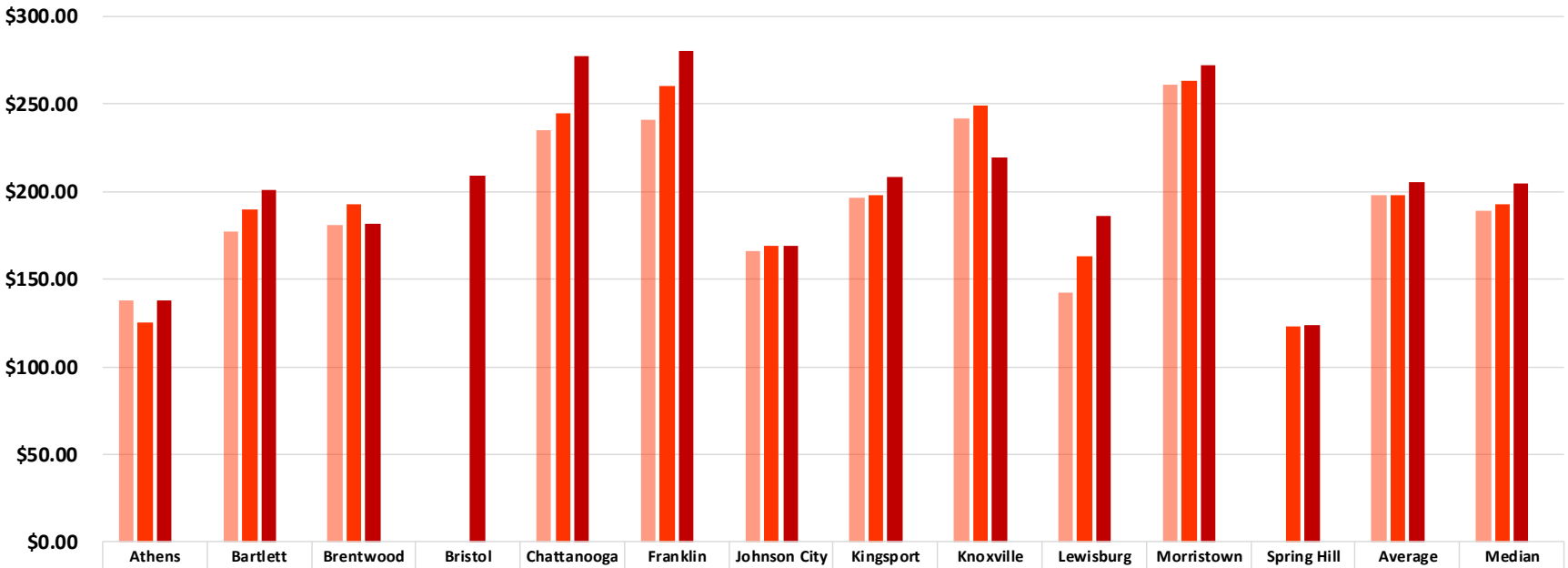
TMBP
TENNESSEE MUNICIPAL BENCHMARKING PROJECT

ALSO IN THIS SECTION:

- Service calls per 1,000 people
- Structure fires per 1,000 people
- Inspections per 1,000 people
- Percent met target fire response time components table

Fire Services

Total Fire Cost per Capita — Resource Benchmark

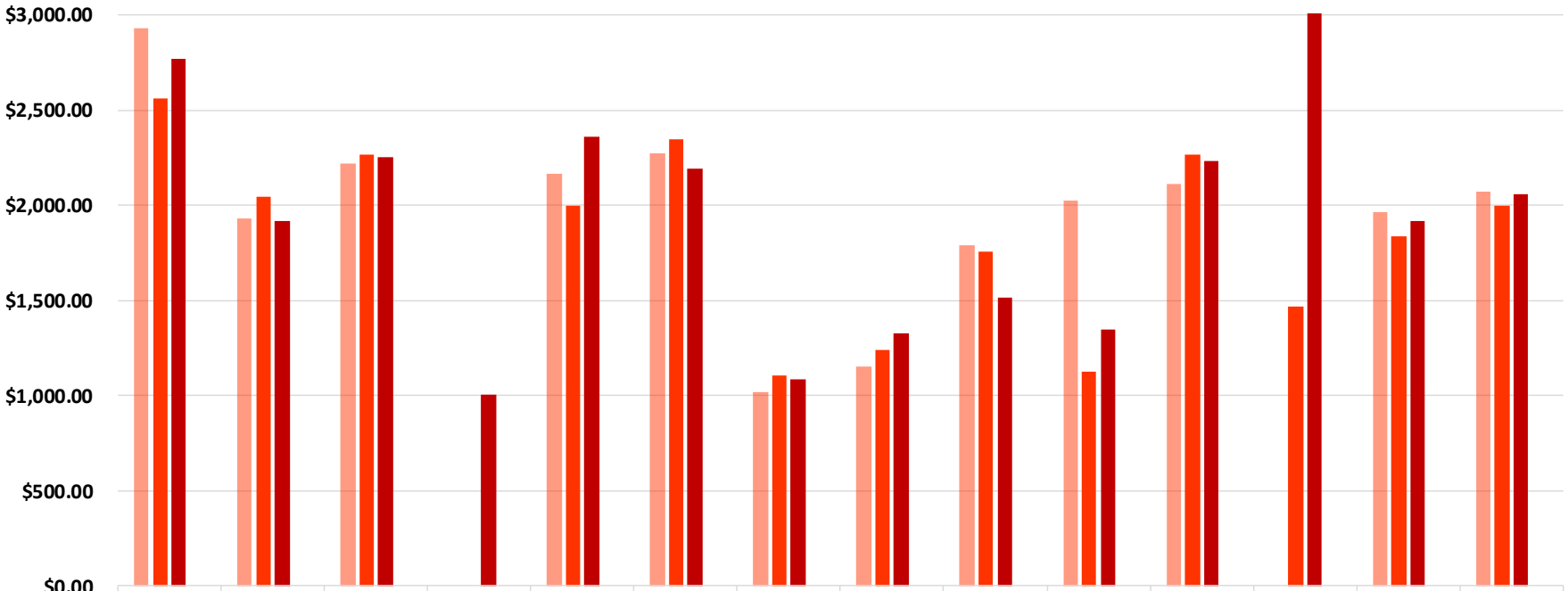


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$137.56	$177.24	$181.06		$234.75	$241.14	$166.13	$196.85	$242.01	$142.54	$260.76		$198.00	$188.96
FY17	$125.44	$190.07	$192.84		$244.39	$260.43	$168.76	$197.94	$249.09	$163.32	$262.96	$122.89	$198.01	$192.84
FY18	$137.85	$201.08	$181.81	$209.31	$277.19	$280.32	$168.93	$208.45	$219.23	$186.16	$272.12	$123.73	$205.52	$204.77
Percent Change from FY17	9.89%	5.79%	-5.72%		13.42%	7.64%	0.10%	5.31%	-11.99%	13.98%	3.48%	0.68%	3.79%	6.18%

Pentana PI code: C.FR067f

Fire Services

Cost per Call for Service — Efficiency Benchmark



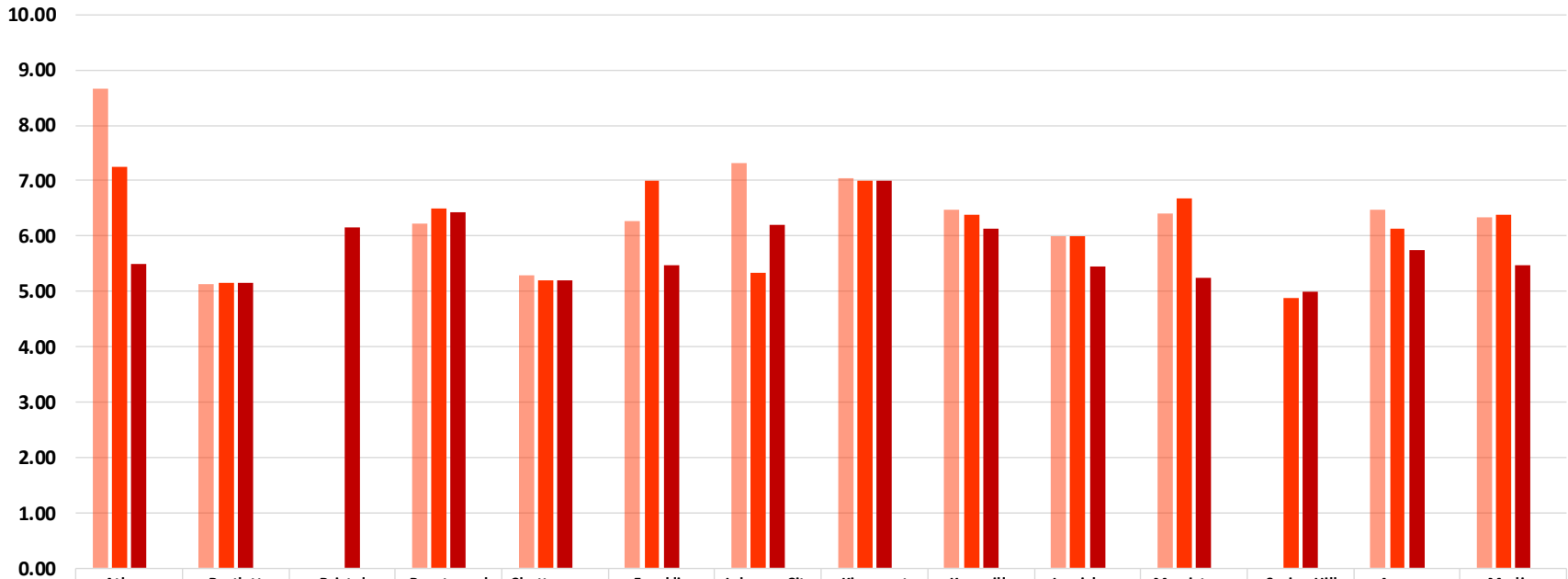
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$2,933.81	$1,932.83	$2,222.67		$2,166.91	$2,273.99	$1,018.91	$1,150.74	$1,791.04	$2,025.91	$2,113.39		$1,963.02	$2,069.65
FY17	$2,561.64	$2,046.22	$2,270.80		$2,001.14	$2,350.65	$1,104.84	$1,242.87	$1,756.01	$1,129.49	$2,266.79	$1,469.96	$1,836.40	$2,001.14
FY18	$2,769.02	$1,920.63	$2,256.66	$1,002.70	$2,358.23	$2,194.41	$1,085.72	$1,327.23	$1,514.53	$1,348.80	$2,232.22	$3,024.81	$1,919.58	$2,057.52
Percent Change from FY17	8.10%	-6.14%	-0.62%		17.84%	-6.65%	-1.73%	6.79%	-13.75%	19.42%	-1.53%	105.77%	4.53%	2.82%

Spring Hill is included in the average and median.

Pentana PI code: P.FR110f

Fire Services

Average Response Time — Effectiveness Benchmark



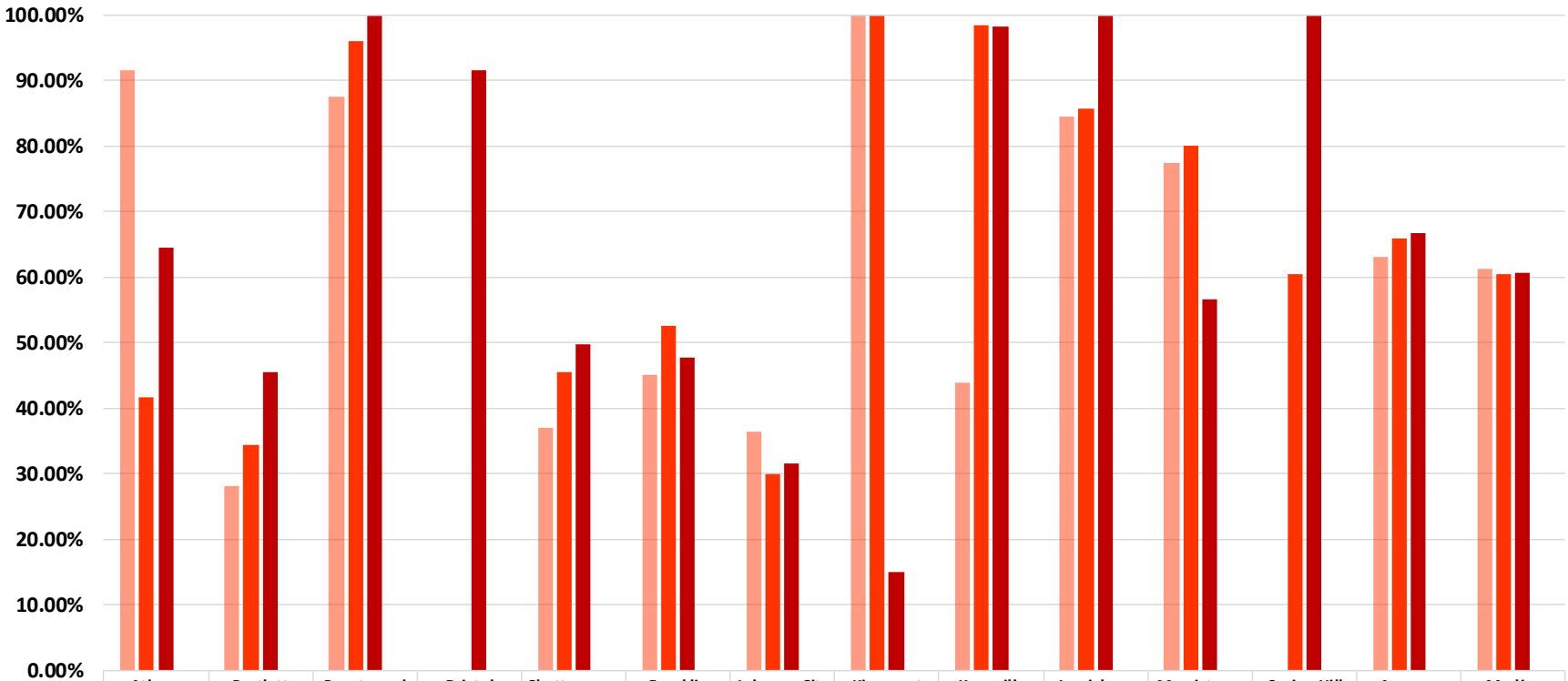
	Athens	Bartlett	Bristol	Brentwood	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	8.67	5.13		6.22	5.30	6.26	7.32	7.04	6.47	6.00	6.41		6.48	6.34
FY17	7.24	5.16		6.49	5.20	7.01	5.33	7.00	6.38	6.00	6.68	4.89	6.13	6.38
FY18	5.49	5.16	6.15	6.42	5.20	5.47	6.21	7.00	6.14	5.45	5.25	5.00	5.75	5.48
Percent Change from FY17	-24.17%	0.00%		-1.08%	0.00%	-21.97%	16.51%	0.00%	-3.76%	-9.17%	-21.41%	2.25%	-6.21%	-14.11%

Note: The proper formatting of the response time data is hours : minutes : seconds. Neither Excel nor Pentana accept this format therefore the time data is formatted in decimal format. For example, please read 6.37 as 00:06:37.

Pentana PI code: P.FR042

Fire Services

Percent of Structure Fires with Cause Determined — Effectiveness Benchmark

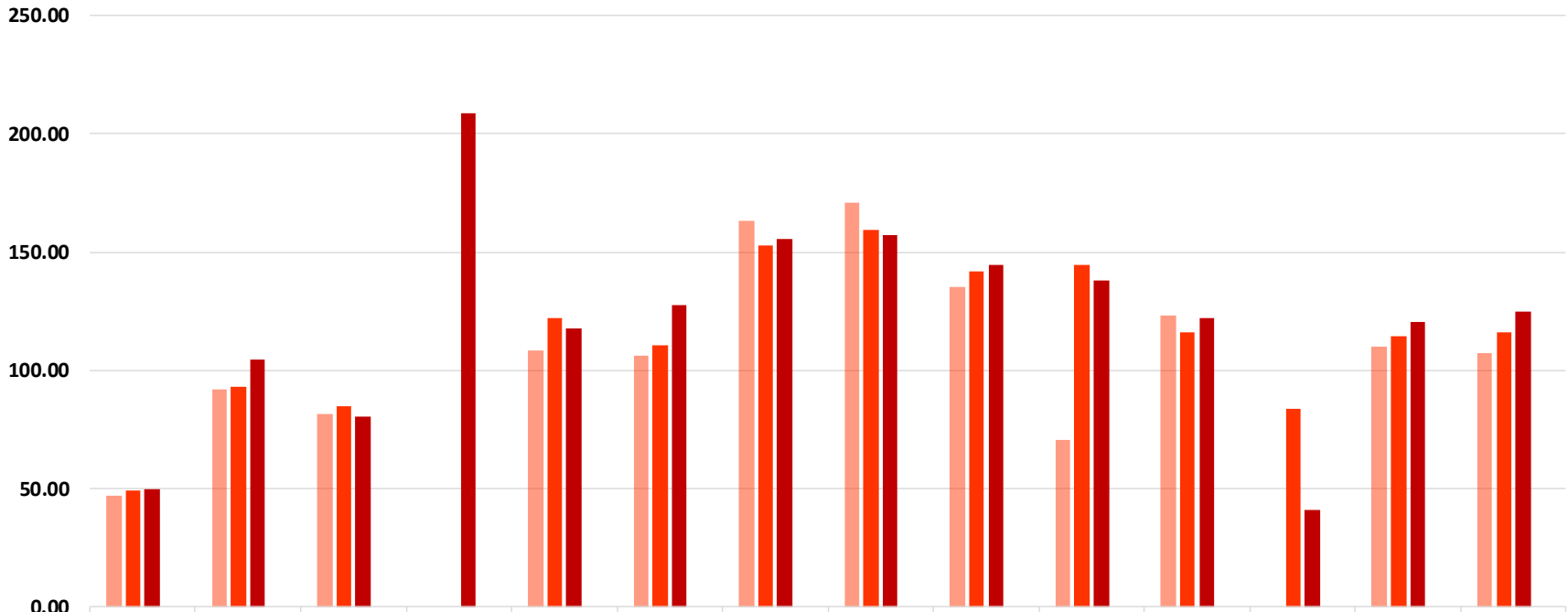


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	91.67%	28.13%	87.50%		37.02%	45.10%	36.36%	100.00%	43.82%	84.62%	77.50%		63.17%	61.30%
FY17	41.67%	34.38%	96.15%		45.56%	52.54%	29.91%	100.00%	98.42%	85.71%	80.00%	60.53%	65.90%	60.53%
FY18	64.52%	45.45%	100%	91.67%	49.70%	47.73%	31.46%	14.89%	98.34%	100%	56.67%	100%	67%	61%
Percent Change from FY17	54.84%	32.20%	4.00%		9.09%	-9.15%	5.18%	-85.11%	-0.08%	16.67%	-29.16%	65.21%	1.22%	0.11%

Pentana PI code: P.FR106f

Fire Services

Calls for Service per 1,000 Population — Workload/Effectiveness Benchmark



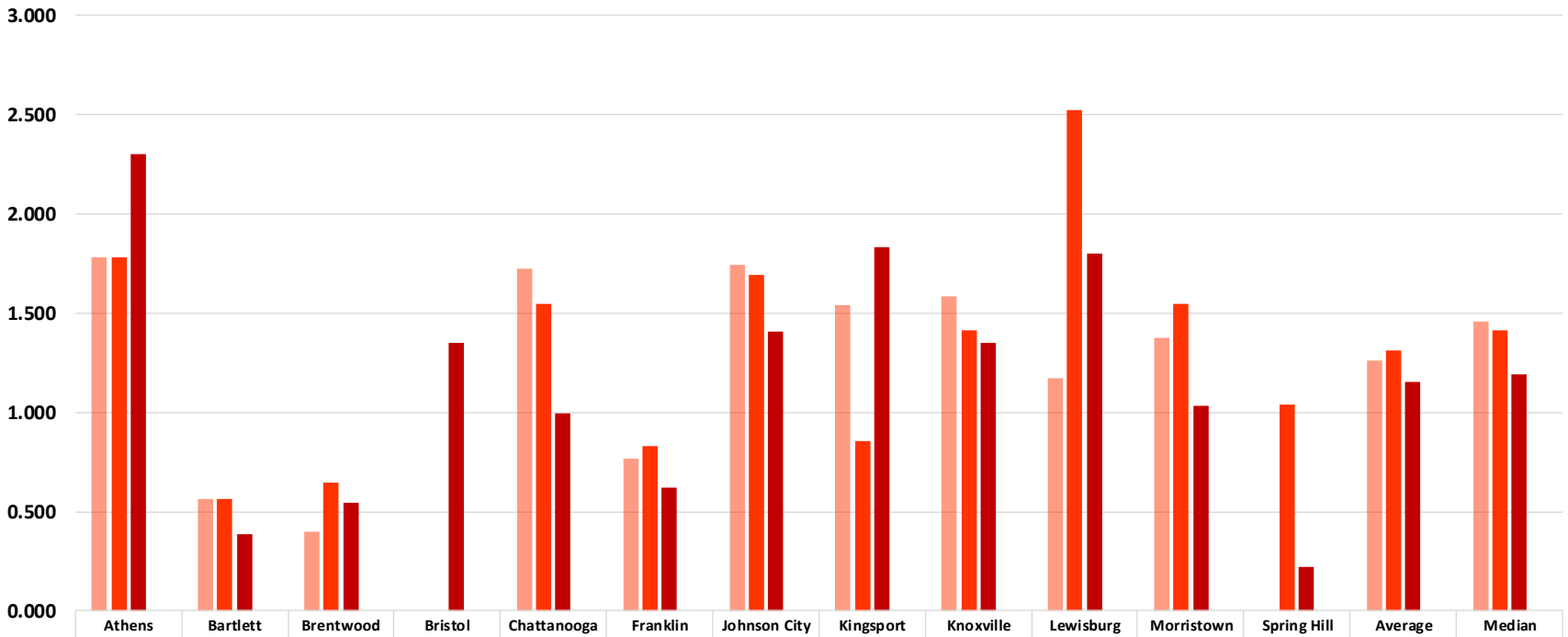
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	46.89	91.70	81.46		108.34	106.04	163.05	171.06	135.12	70.36	123.38		109.74	107.19
FY17	48.97	92.89	84.92		122.12	110.79	152.74	159.26	141.85	144.59	116.00	83.60	114.34	116.00
FY18	49.78	104.69	80.57	208.75	117.54	127.74	155.59	157.06	144.75	138.02	121.91	40.90	120.61	124.82
Percent Change from FY17	1.65%	12.70%	-5.13%		-3.75%	15.30%	1.87%	-1.38%	2.04%	-4.55%	5.09%	-51.07%	5.48%	7.60%

Bristol Fire Department handles EMS calls and is included in the average and median.

Pentana PI code: P.FR088f

Fire Services

Structure Fires per 1,000 Population — Workload Benchmark



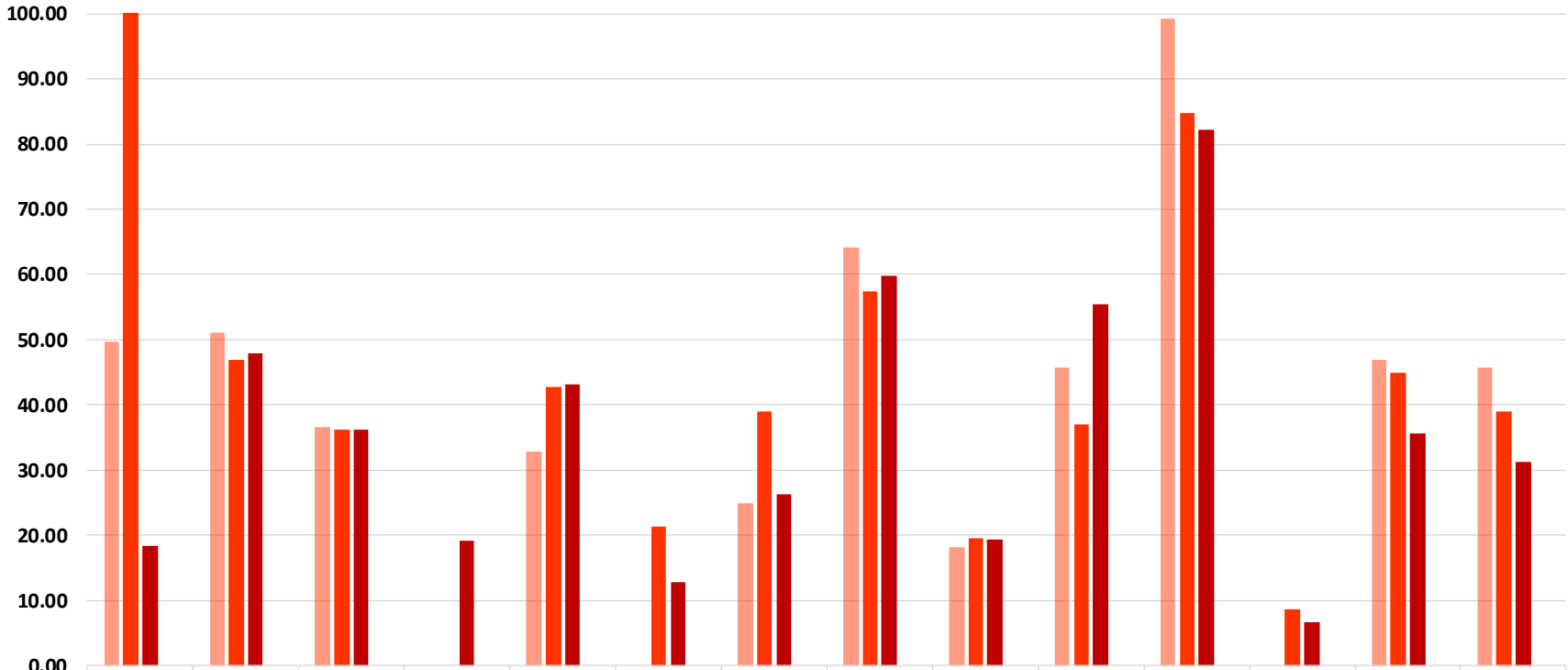
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	1.780	0.566	0.396		1.724	0.768	1.742	1.541	1.582	1.171	1.373		1.264	1.457
FY17	1.780	0.566	0.644		1.545	0.832	1.694	0.858	1.414	2.523	1.544	1.040	1.313	1.414
FY18	2.300	0.389	0.547	1.348	0.996	0.621	1.409	1.833	1.347	1.802	1.030	0.223	1.154	1.189
Percent Change from FY17	29.21%	-31.27%	-15.06%		-35.53%	-25.36%	-16.82%	113.64%	-4.74%	-28.58%	-33.29%	-78.56%	-12.11%	-15.95%

Morristown is included in the average and median.

Pentana PI code: P.FR092f

Fire Services

Fire Inspections per 1,000 Population — Workload Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	49.64	51.07	36.56		32.91		24.89	64.07	18.23	45.68	99.19		46.92	45.68
FY17	100.31	46.91	36.11		42.68	21.28	39.03	57.42	19.48	36.94	84.77	8.57	44.86	39.03
FY18	18.43	47.97	36.18	19.14	43.21	12.86	26.27	59.74	19.26	55.50	82.16	6.60	35.61	31.23
Percent Change from FY17	-81.63%	2.26%	0.19%		1.24%	-39.57%	-32.69%	4.04%	-1.13%	50.23%	-3.08%	-22.95%	-20.63%	-20.00%

Pentana PI code: P.FR093f

Fire Services

Percent Met Target Fire Response Time Components

In FY2013, TMBP members began collecting data on percent of target times met across the various time components for fire response, as defined by National Fire Protection Association (NFPA) 1710.

The table on the top right shows the NFPA recommended target percentage for each time component.

While all cities are not able to report each of these time components, most cities are able to report on at least one. Since FY2013 more cities are reporting the data and the quality of the data reported will continue to improve as well.

NFPA 1710 Component	Recommended Time in Seconds	Percent Goal to Meet
Ring-time (NFPA 1710 4.1.2.3.1)	15	95%
Call processing time (also known as alarm handling time) (NFPA 1710 4.1.2.3.3)	60	90%
Turnout time – fire call (NFPA 1710 4.1.2.1(2))	80	90%
Travel time (NFPA 1710 4.1.2.1(3))	240	90%
Total	395 (6 minutes, 35 seconds)	90%

FY2018 TMBP Fire Response Time Components	% Met Target Total Response Time	% Met Target Ring Time	% Met Target Call Processing Time	% Met Target Turnout Time	% Met Target Travel Time
Athens	41%	5%	21%	32%	19%
Bartlett	85%	N/A	N/A	N/A	N/A
Brentwood	62%	N/A	76%	71%	50%
Bristol	67%	55.51%	50.85%	55.51%	50.85%
Chattanooga	100%	N/A	N/A	90%	90%
Franklin	N/A	N/A	N/A	74.84%	N/A
Johnson City	79.20%	N/A	50.1%	84.30%	52.80%
Kingsport	N/A	95%	90%	39.08%	23.85%
Knoxville	67%	100%	66%	45%	65%
Lewisburg	90%	99.34%	95%	100%	90%
Morristown	86.36%	98.75%	100%	83%	67%
Spring Hill	100%	N/A	100%	2%	5%

INFORMATION TECHNOLOGY SERVICES
MEDIANS FOR FY18

THINGS TO CONSIDER:

Information Technology (IT) services are largely an internal operation with clients being other city departments, not citizens. However, as technology continues to expand and both internal and external clients become more technology dependent, advances in IT services are paramount. Performance measures collected in this service area include, but are not limited to, IT devices managed, help desk requests, IT cost, and the percent of help desk requests resolved.

A special caution to the reader is appropriate in examining the city-specific IT benchmarks, because some of these measures are still being refined.

71% Help desk calls or service requests resolved on the first call

85% Help desk calls or service requests resolved with 3 days

Total request for help per IT FTE **579.34**

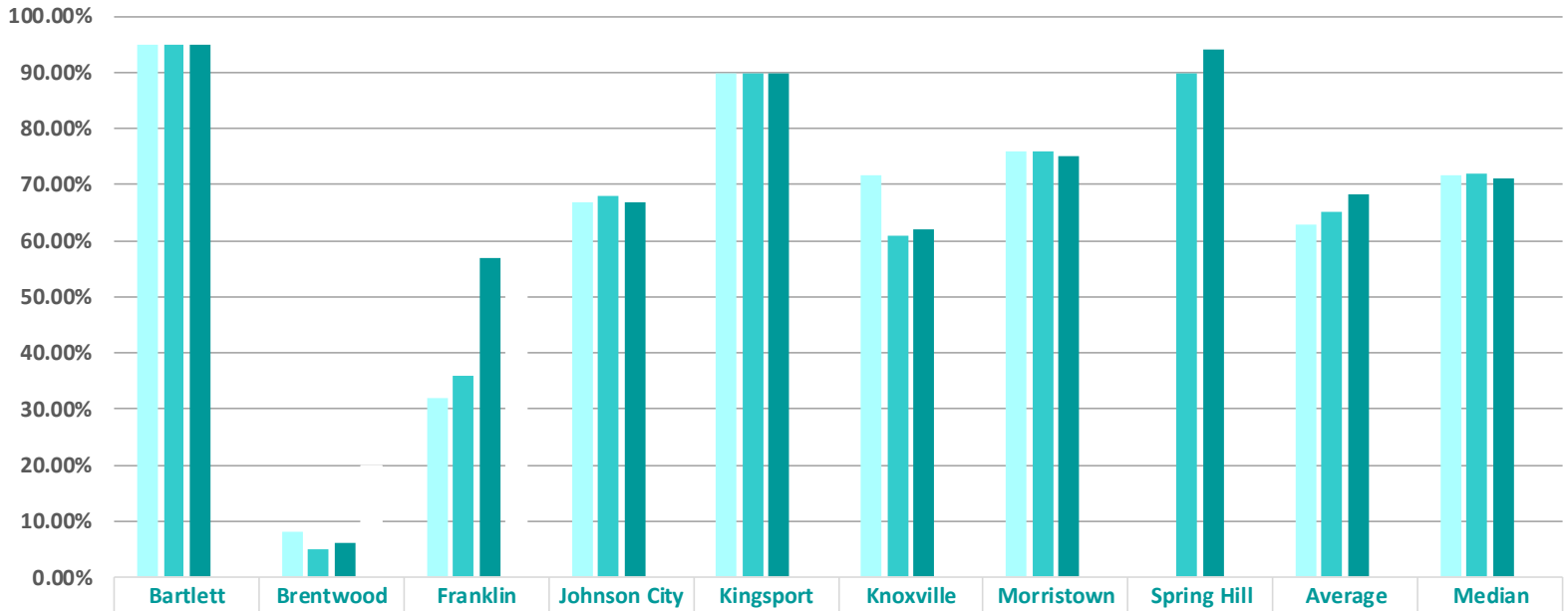
$1,491.32 Total cost of IT Services per city-wide FTE

TMBP
TENNESSEE MUNICIPAL BENCHMARKING PROJECT

ALSO IN THIS SECTION:
- Projects completed within budget
- Disaster recovery rating

Information Technology Services

Help Desk Calls/Service Requests with First Call Resolution — Effectiveness Benchmark

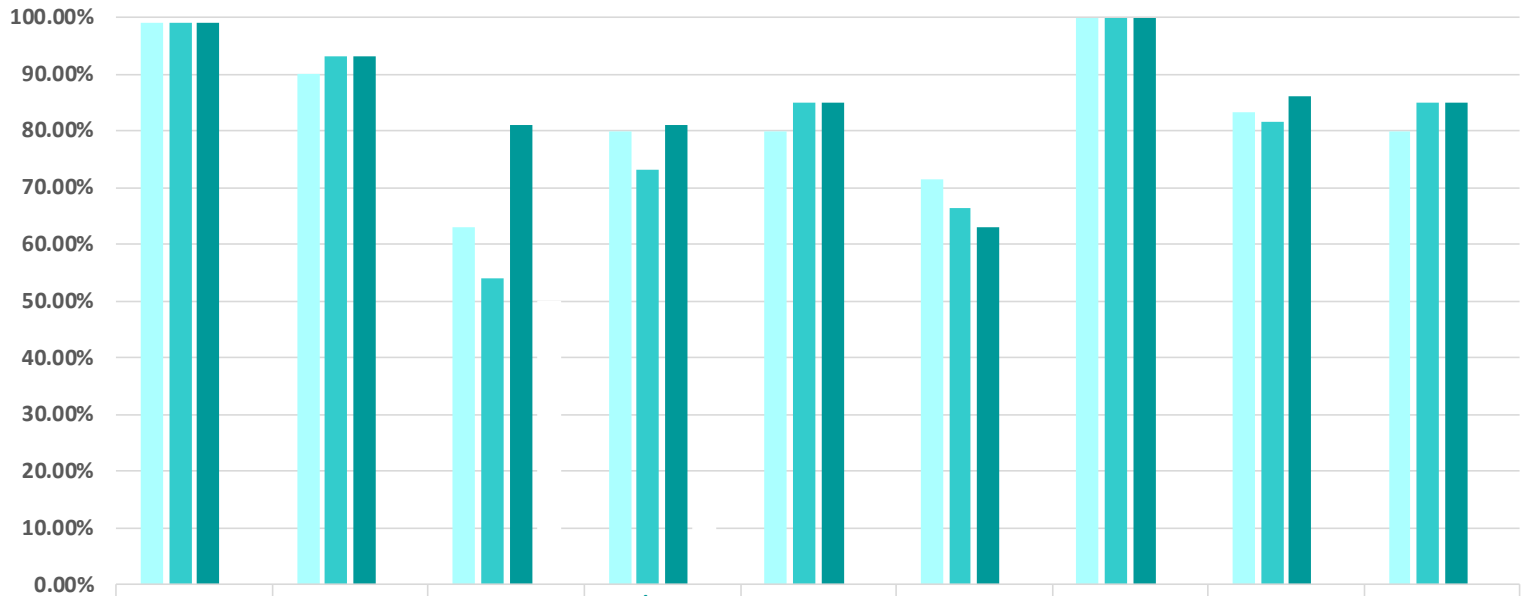


	Bartlett	Brentwood	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	95.00%	8.00%	32.00%	67.00%	90.00%	71.70%	76.00%		62.81%	71.70%
FY17	95.00%	5.00%	36.00%	68.00%	90.00%	61.00%	76.00%	90.00%	65.13%	72.00%
FY18	95.00%	6.00%	57.00%	67.00%	90.00%	62.00%	75.00%	94.00%	68.25%	71.00%
Percent Change from FY17	0.00%	20.00%	58.33%	-1.47%	0.00%	1.64%	-1.32%	4.44%	4.80%	-1.39%

Pentana PI code: P.IT018

Information Technology Services

Help Desk Calls/Service Requests Resolved within 3 Days — Effectiveness Benchmark

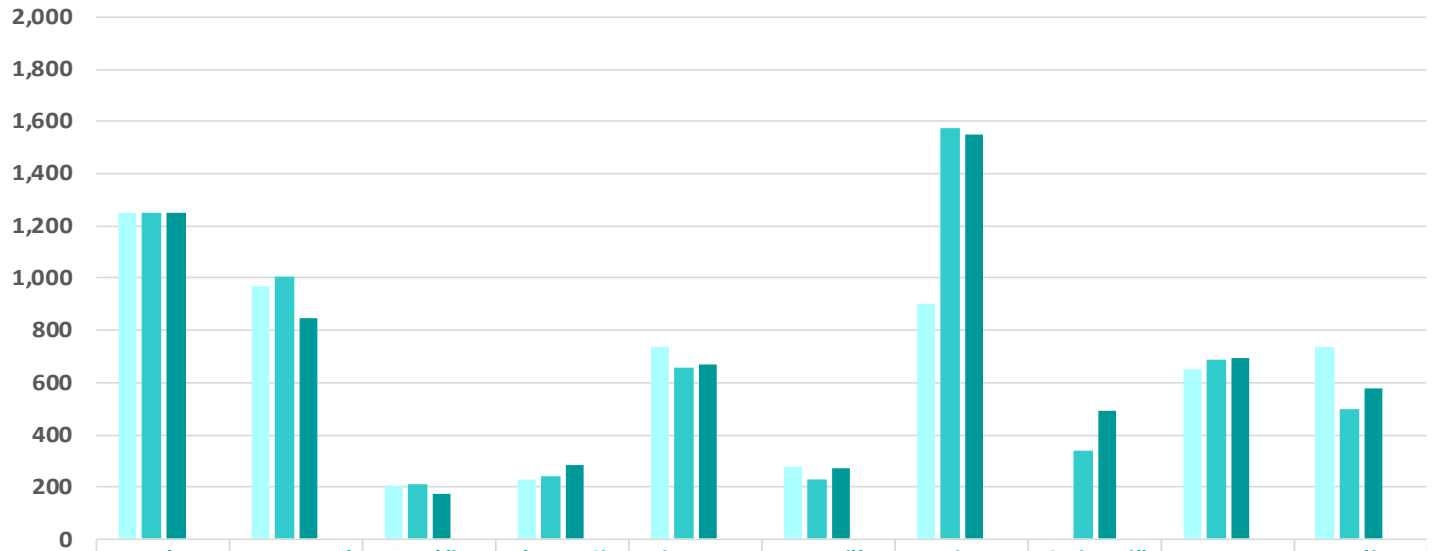


	Bartlett	Brentwood	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Average	Median
FY16	99.00%	90.00%	63.00%	80.00%	80.00%	71.40%	100.00%	83.34%	80.00%
FY17	99.00%	93.00%	54.00%	73.00%	85.00%	66.40%	100.00%	81.49%	85.00%
FY18	99.00%	93.00%	81.00%	81.00%	85.00%	63.00%	100.00%	86.00%	85.00%
Percent Change from FY17	0.00%	0.00%	50.00%	10.96%	0.00%	-5.12%	0.00%	5.54%	0.00%

Pentana PI code: P.IT017

Information Technology Services

Total Help Desk/Service Requests per IT FTE (City and Contract) — Workload Benchmark



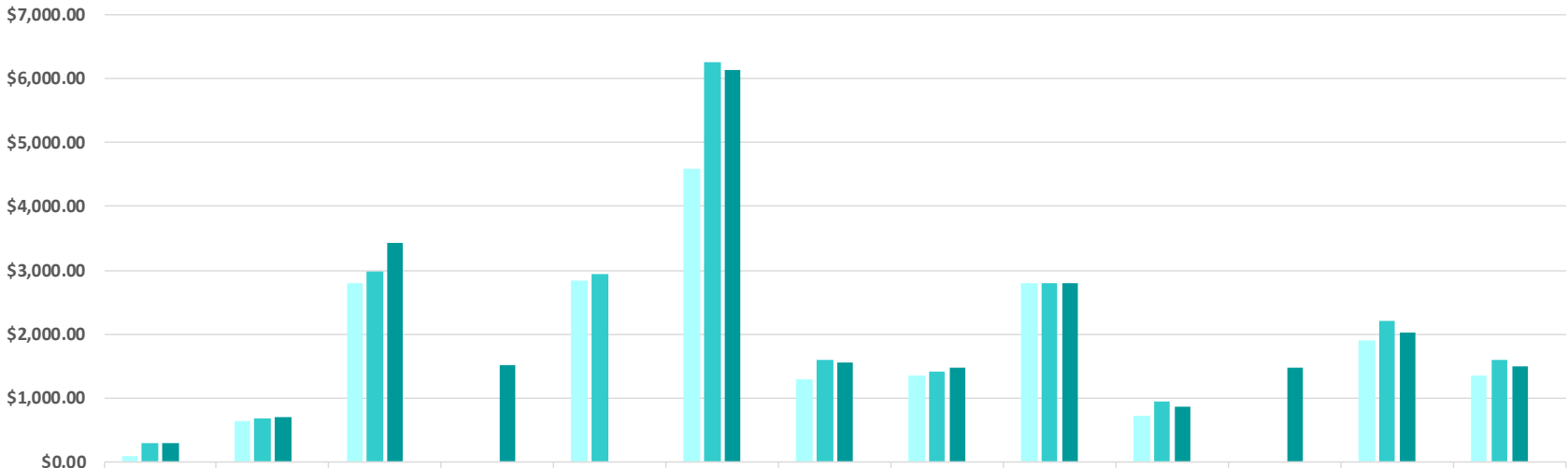
	Bartlett	Brentwood	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	1,250.00	970.94	201.61	230.00	737.70	280.26	900.00		652.93	737.70
FY17	1,250.00	1,004.24	209.49	243.16	655.74	231.62	1,575.00	338.00	688.41	496.87
FY18	1,250.00	849.18	173.17	286.58	666.67	271.50	1,550.00	492.00	692.39	579.34
Percent Change from FY17	0.00%	-15.44%	-17.34%	17.86%	1.67%	17.22%	-1.59%	45.56%	0.58%	16.60%

Morristown is included in the average and median.

Pentana PI code: P.IT043f

Information Technology Services

Cost of IT Services per City-Wide FTE — Resource Benchmark



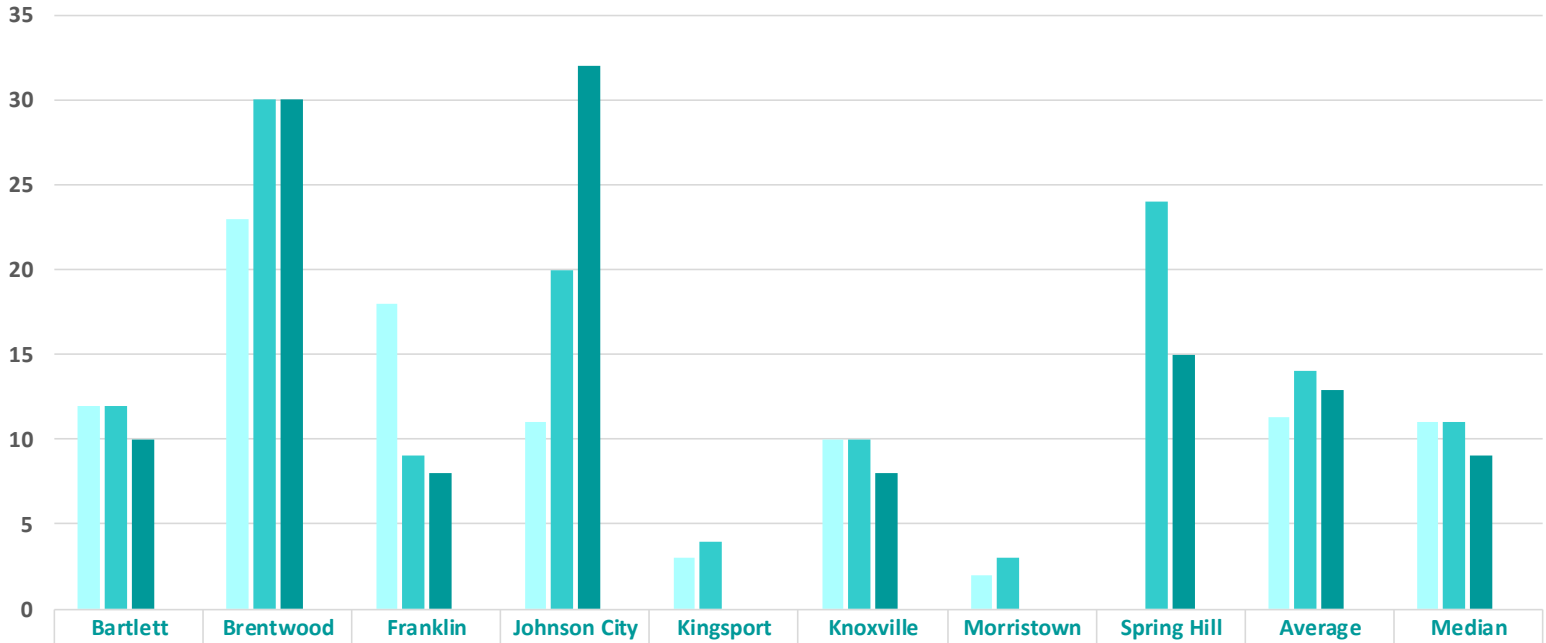
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	$84.77	$644.04	$2,806.58		$2,831.94	$4,583.87	$1,293.31	$1,352.91	$2,796.56	$728.18		$1,902.46	$1,352.91
FY17	$299.20	$681.63	$2,986.56		$2,946.45	$6,250.15	$1,599.90	$1,417.17	$2,796.30	$951.68		$2,214.34	$1,599.90
FY18	$292.62	$703.41	$3,436.67	$1,508.03		$6,128.51	$1,549.48	$1,465.42	$2,795.33	$872.18	$1,474.60	$2,022.63	$1,491.32
Percent Change from FY17	-2.20%	3.20%	15.07%			-1.95%	-3.15%	3.40%	-0.03%	-8.35%		-8.66%	-6.79%

Franklin is included in the average and median.

Pentana PI code: P.IT044f

Information Technology Services

Projects Completed within Budget — Effectiveness Benchmark

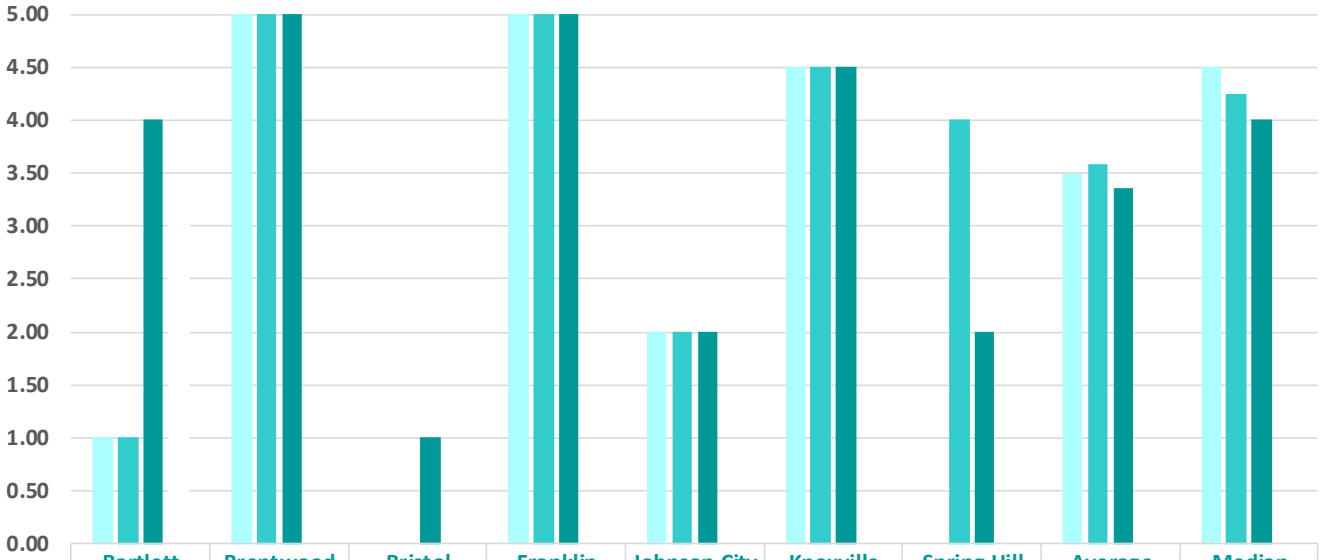


	Bartlett	Brentwood	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	12	23	18	11	3	10	2		11	11
FY17	12	30	9	20	4	10	3	24	14	11
FY18	10	30	8	32	0	8	0	15	13	9
Percent Change from FY17	-17%	0%	-11%	60%	-100%	-20%	-100%	-38%	-8%	-18%

Pentana PI code: P.IT021

Cities' Self-Assessment on Disaster Recovery Rating — Effectiveness Benchmark

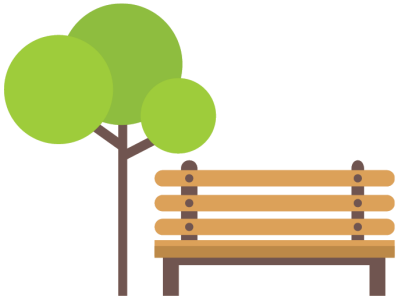
Members grade themselves on IT disaster recovery preparedness using the following scale: 0 = No Disaster recovery planning 1 = An approved written plan 2 = Written Plan in place and 50% executed 3 = Written Plan in place and 75% executed 4 = Written Plan in place and 100% executed – The plan includes all departments. 5 = All the above plus all systems are fully redundant including a DR backup site.



	Bartlett	Brentwood	Bristol	Franklin	Johnson City	Knoxville	Spring Hill	Average	Median
FY16	1.00	5.00		5.00	2.00	4.50		3.50	4.50
FY17	1.00	5.00		5.00	2.00	4.50	4.00	3.58	4.25
FY18	4.00	5.00	1.00	5.00	2.00	4.50	2.00	3.36	4.00
Percent Change from FY17	300.00%	0.00%		0.00%	0.00%	0.00%	-50.00%	-6.31%	-5.88%

Pentana PI code: P.IT041

PARKS & RECREATION SERVICES
MEDIANS FOR FY18



THINGS TO CONSIDER:

Data collected in the parks and recreation service area include staffing, grant proceeds, acres maintained, participation in activities and events offered, facilities and hours, greenway miles and fees collected.

Members continue to refine the data collected in this service area to ensure comparability across the widely different participating municipal parks and recreation programs.

20.92 Park acres maintained per FTE

Total parks & rec cost per capita **$102.74**

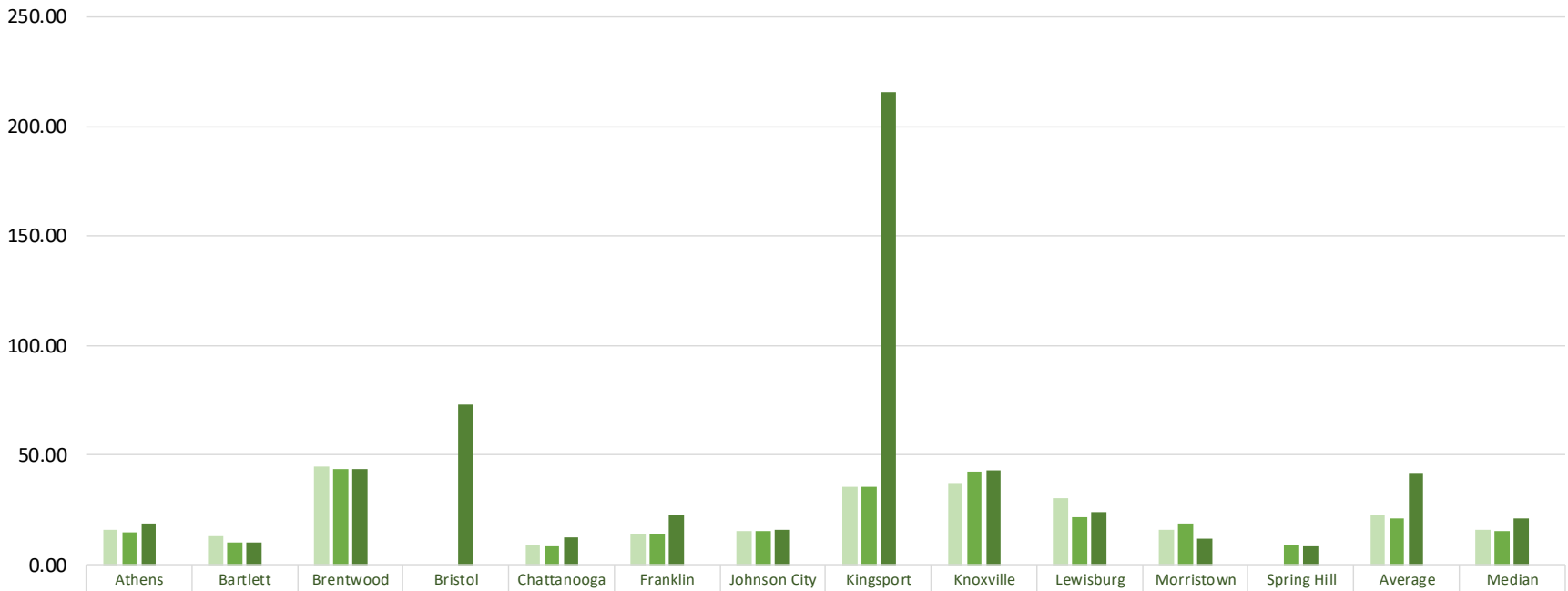
12.75% Percentage of parks & rec cost supported by user fees

Total cost per park acre maintained **$6,072.37**

TMBP
TENNESSEE MUNICIPAL BENCHMARKING PROJECT

Parks and Recreation Services

Number of Park Acres Maintained per (Total) FTE — Resource Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	16.16	12.71	44.88		8.68	14.08	15.22	35.57	36.99	30.13	15.82		23.02	15.99
FY17	14.84	9.93	43.86		8.44	14.08	15.07	35.50	42.53	21.91	18.88	8.67	21.25	15.07
FY18	18.98	10.27	43.86	72.95	12.20	22.85	15.69	215.43	42.94	23.72	11.70	8.47	41.59	20.92
Percent change from FY17	27.90%	3.42%	0.00%		44.55%	62.29%	4.11%	506.85%	0.96%	8.26%	-38.03%	-2.31%	95.75%	38.79%

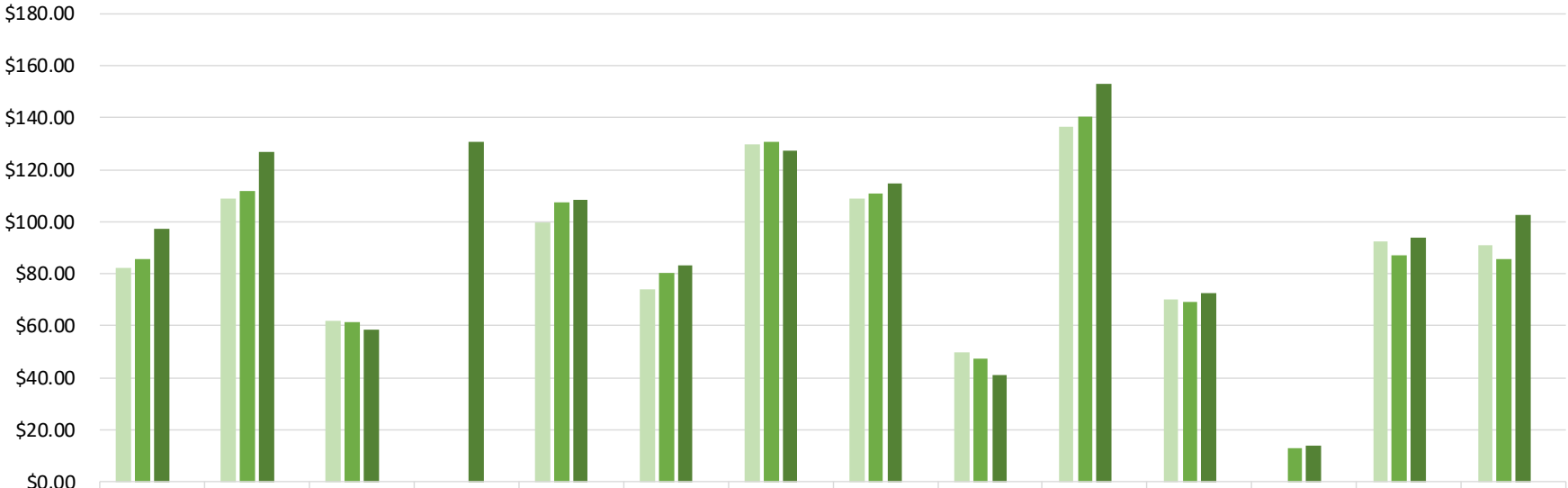
Kingsport's increase on this benchmark for FY2018 was caused by a decrease in the number of FTE's reported for Parks and Recreation for FY2018. An organization restructuring resulted in the exclusion of the Aquatic Center staff from the Parks and Recreation total FTE count.

Franklin's increase from FY2017 to FY2018 is a result of the addition of acreage to the Franklin parks system.

Pentana PI code: P.PR040f

Parks and Recreation Services

Total Parks and Recreation Cost per Capita — Resource Benchmark



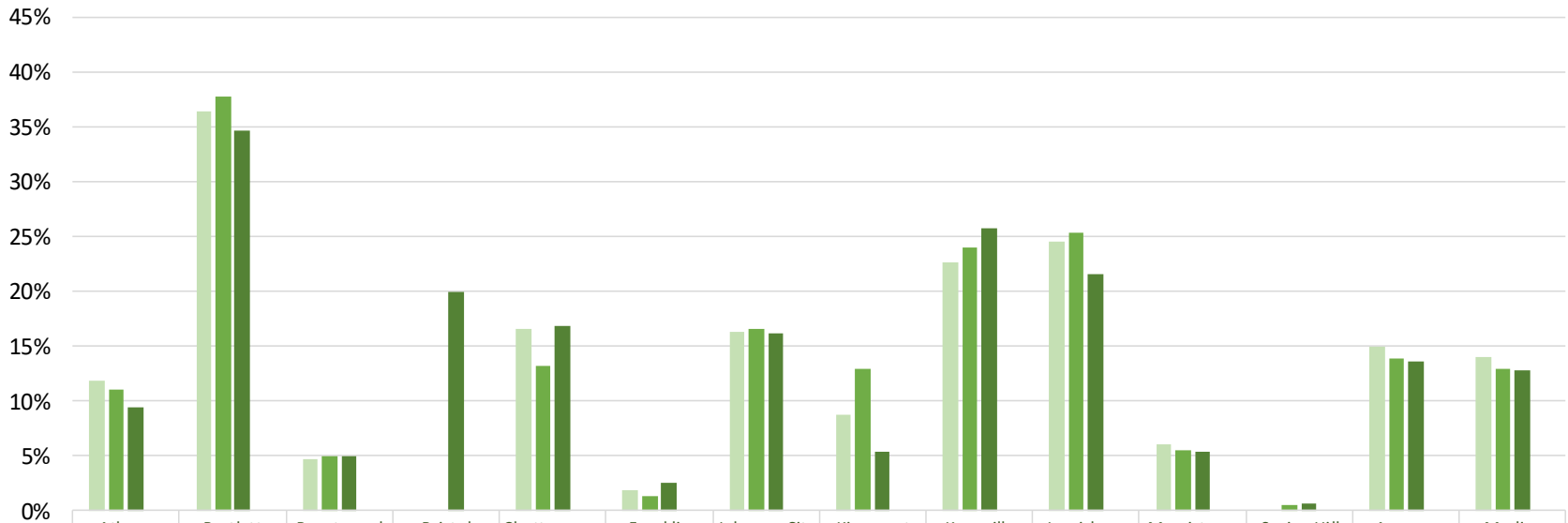
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$82.26	$108.92	$61.85		$99.81	$73.74	$129.77	$108.87	$49.78	$136.50	$70.14		$92.16	$91.04
FY17	$85.59	$111.67	$61.11		$107.47	$80.25	$130.50	$110.63	$47.10	$140.55	$69.27	$12.84	$87.00	$85.59
FY18	$97.03	$126.63	$58.41	$130.83	$108.45	$83.02	$127.17	$114.67	$41.16	$152.99	$72.70	$13.84	$93.91	$102.74
Percent change from FY17	13.37%	13.40%	-4.42%		0.91%	3.45%	-2.55%	3.65%	-12.61%	8.85%	4.95%	7.79%	7.94%	20.04%

Bristol Parks and Recreation Department is responsible for the maintenance of all city facilities (includes buildings and grounds).

Pentana PI code: C.PR067f

Parks and Recreation Services

Percentage of Costs Supported by User Fees Collected — Efficiency Benchmark

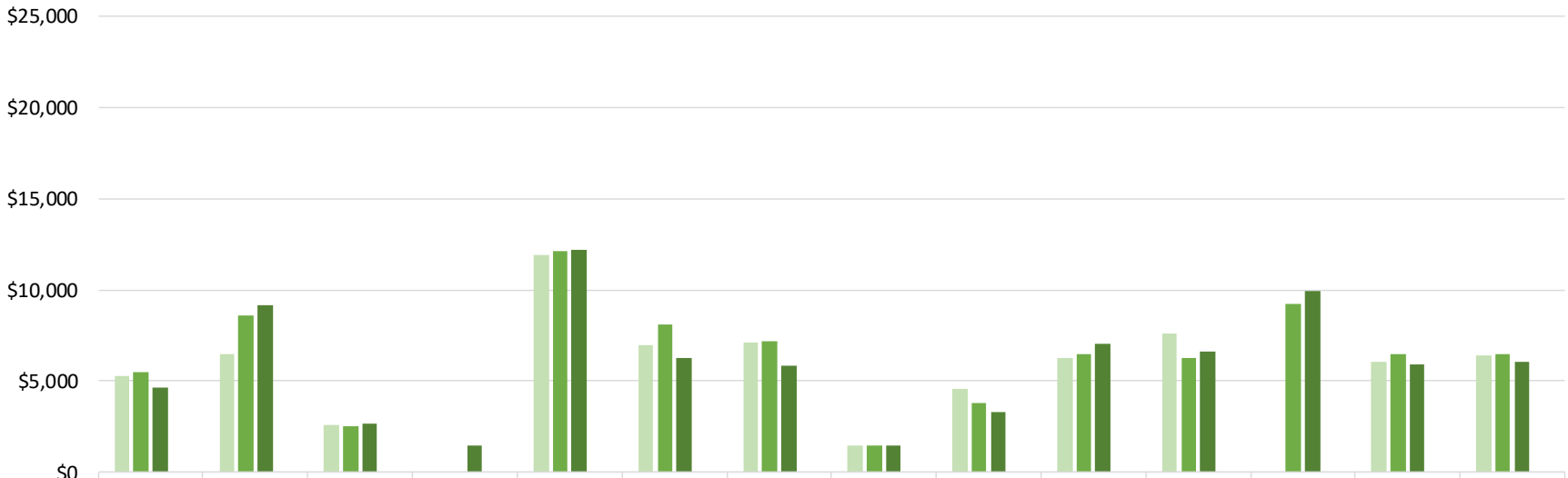


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	11.79%	36.46%	4.67%		16.52%	1.83%	16.34%	8.73%	22.71%	24.48%	6.07%		14.96%	14.07%
FY17	11.11%	37.73%	4.95%		13.26%	1.36%	16.57%	12.94%	24.05%	25.31%	5.48%	0.52%	13.93%	12.94%
FY18	9.36%	34.69%	4.91%	19.92%	16.85%	2.58%	16.14%	5.44%	25.78%	21.51%	5.44%	0.59%	13.60%	12.75%
Percent change from FY17	-15.75%	-8.06%	-0.81%		27.07%	89.71%	-2.60%	-57.96%	7.19%	-15.01%	-0.73%	13.46%	-2.39%	-1.47%

Pentana PI code: P.PR044f

Parks and Recreation Services

Total Costs per Total Park and Recreation Acres Maintained — Effectiveness Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$5,251.63	$6,483.26	$2,589.43		$11,932.99	$6,952.28	$7,126.03	$1,469.74	$4,582.81	$6,286.73	$7,596.98		$6,027.19	$6,385.00
FY17	$5,464.43	$8,570.94	$2,558.24		$12,110.70	$8,082.96	$7,166.21	$1,493.60	$3,771.07	$6,473.60	$6,287.55	$9,199.00	$6,470.75	$6,473.60
FY18	$4,627.67	$9,135.82	$2,656.31	$1,451.11	$12,214.81	$6,282.77	$5,861.97	$1,494.58	$3,295.84	$7,046.29	$6,599.29	$9,912.13	$5,881.55	$6,072.37
Percent change from FY17	-15.31%	6.59%	3.83%		0.86%	-22.27%	-18.20%	0.07%	-12.60%	8.85%	4.96%	7.75%	-9.11%	-6.20%

Pentana PI code: C.PR045f

POLICE SERVICES
MEDIANS FOR FY18

THINGS TO CONSIDER:

Police Services consist of traditional law enforcement functions, including patrol, investigations, and police administration.

These functions encompass preventive patrols, traffic enforcement, responding to calls for service, and investigation of crimes.

Specifically excluded from the service definition are: animal control and emergency communications (dispatch).

Due to the long-standing practice of reporting by veteran cities, FTE and cost numbers are to be reported excluding jail, court, or dispatch employees.

We also asked cities to break down reporting for support positions per police administration/support, jail, and dispatch categories in an effort to collect thorough, yet tcomparable data.

Number of TIBRS Type A Crimes per 1,000 people **105.79**

555.26 Calls per sworn officer

Percentage of traffic accidents that occur with injury **15.52%**

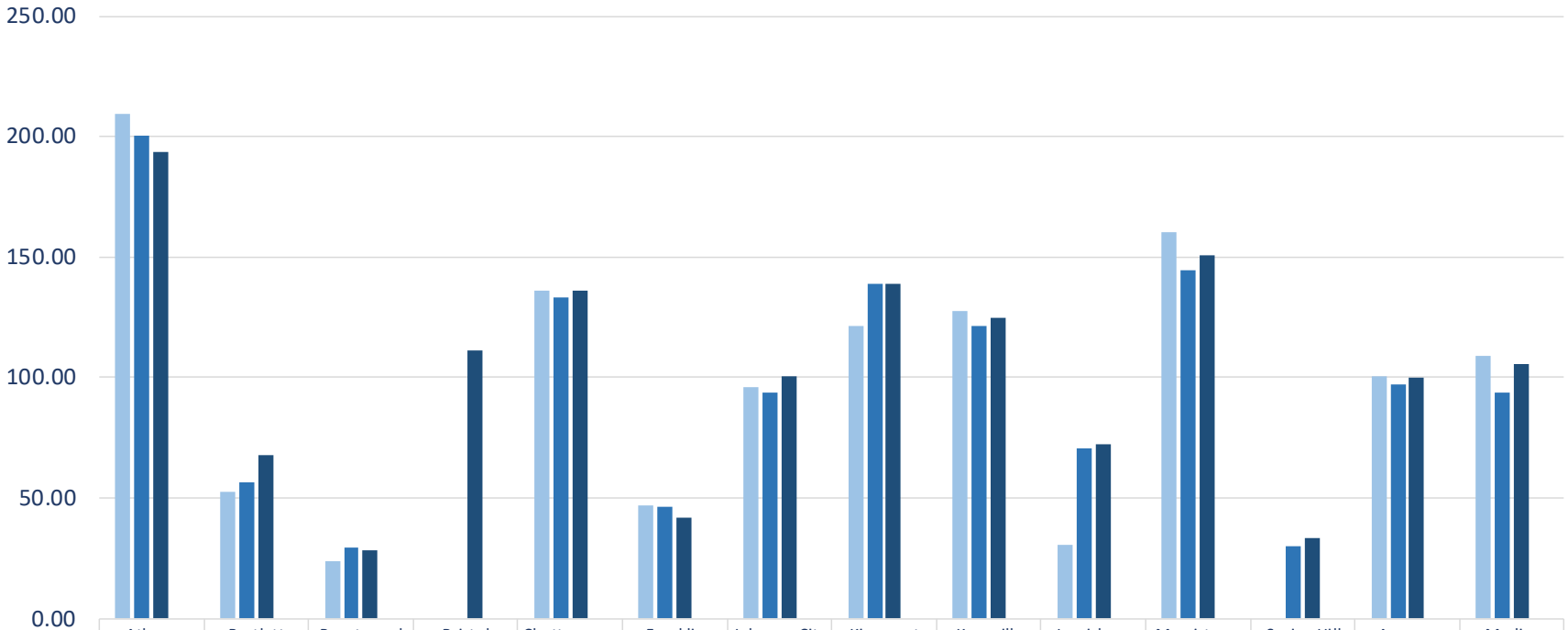
TMBP
TENNESSEE MUNICIPAL BENCHMARKING PROJECT

ALSO IN THIS SECTION:

- Public property accidents per 1000 people
- Police FTE per 1,000 people
- Total police services cost per capita
- Cost per call for service

Police Services

TIBRS Type A Crimes per 1,000 Population — Workload Benchmark



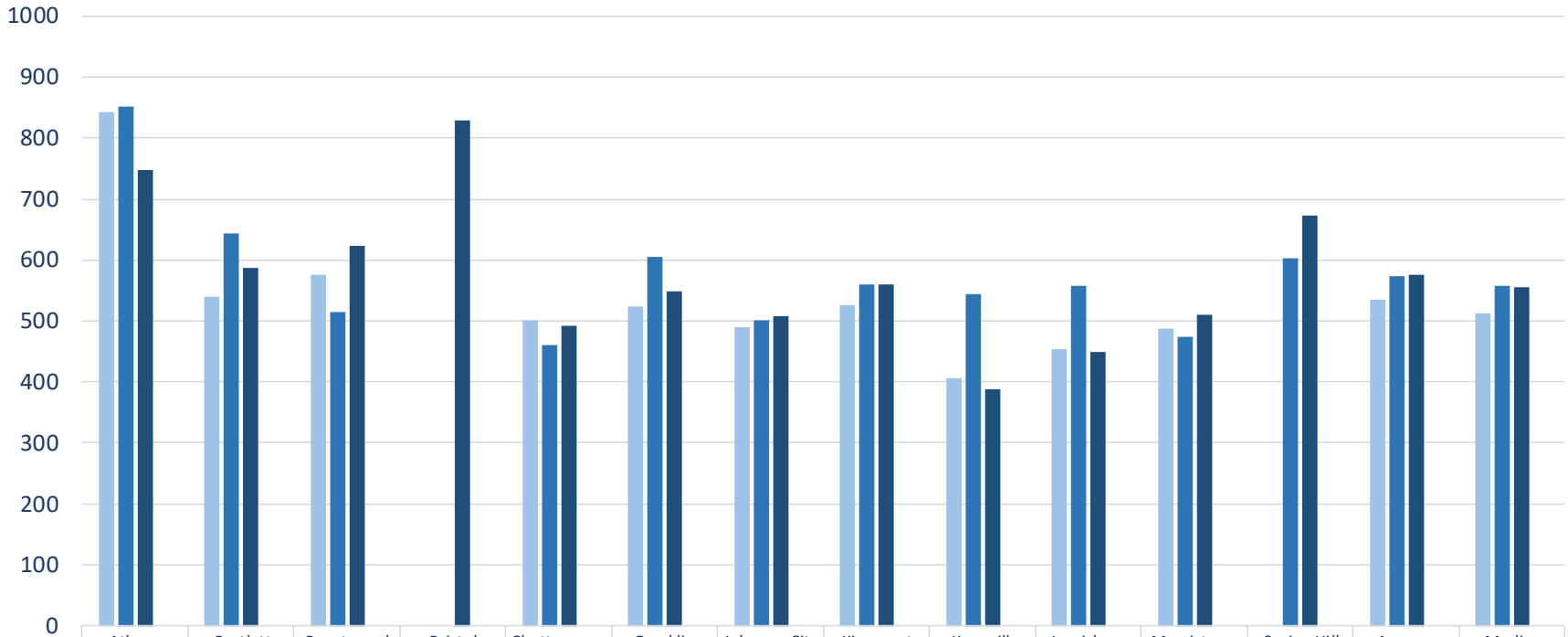
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	209.62	52.22	23.51		136.11	47.08	96.18	121.33	127.29	30.54	160.31		100.42	108.76
FY17	200.18	56.68	29.41		133.08	46.14	93.46	138.98	121.52	70.54	144.66	30.11	96.80	93.46
FY18	193.57	67.82	28.28	111.37	135.86	41.96	100.20	138.98	124.98	72.43	150.74	33.09	99.94	105.79
Percent change from FY17	-3.30%	19.65%	-3.84%		2.09%	-9.06%	7.21%	0.00%	2.85%	2.68%	4.20%	9.89%	3.25%	13.19%

Athens is included in the average and median.

Pentana PI code: P.PS030f

Police Services

Calls per Sworn Officer — Efficiency Benchmark

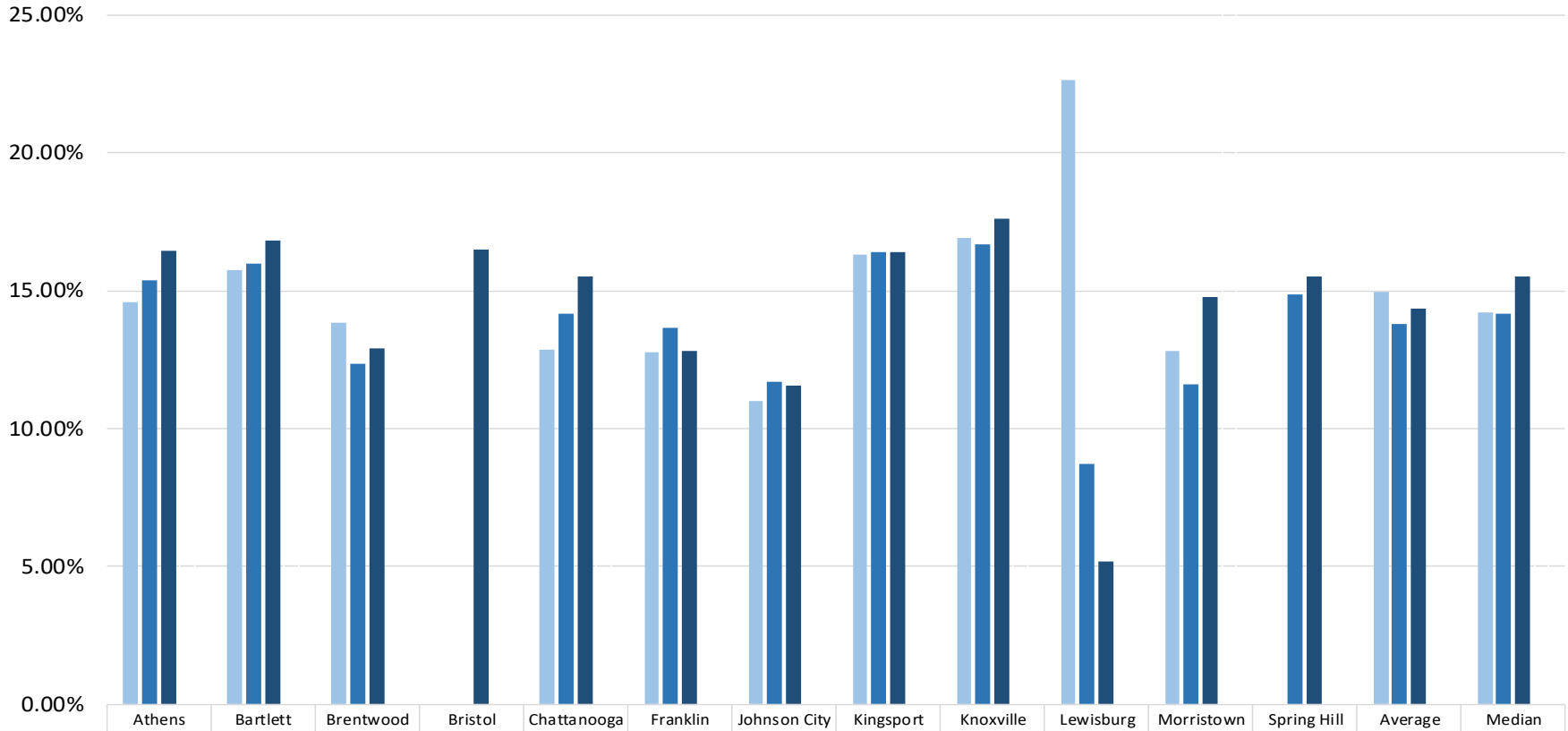


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	843.71	539.69	576.11		500.56	524.1	489.77	526.75	406.01	453.41	486.77		534.69	512.33
FY17	850.81	644.03	514.59		461.53	605.95	500.66	560.89	544.32	556.63	474.36	602.15	574.17	556.63
FY18	747.58	586.22	623.07	828.71	491.88	549.63	507.27	560.89	387.16	450.25	510.97	673.25	576.41	555.26
Percent change from FY17	-12.13%	-8.98%	21.08%		6.58%	-9.29%	1.32%	0.00%	-28.87%	-19.11%	7.72%	11.81%	0.39%	-0.25%

Pentana PI code: P.PS042f

Police Services

Traffic Accidents with Injury per Total Traffic Accidents — Effectiveness Benchmark



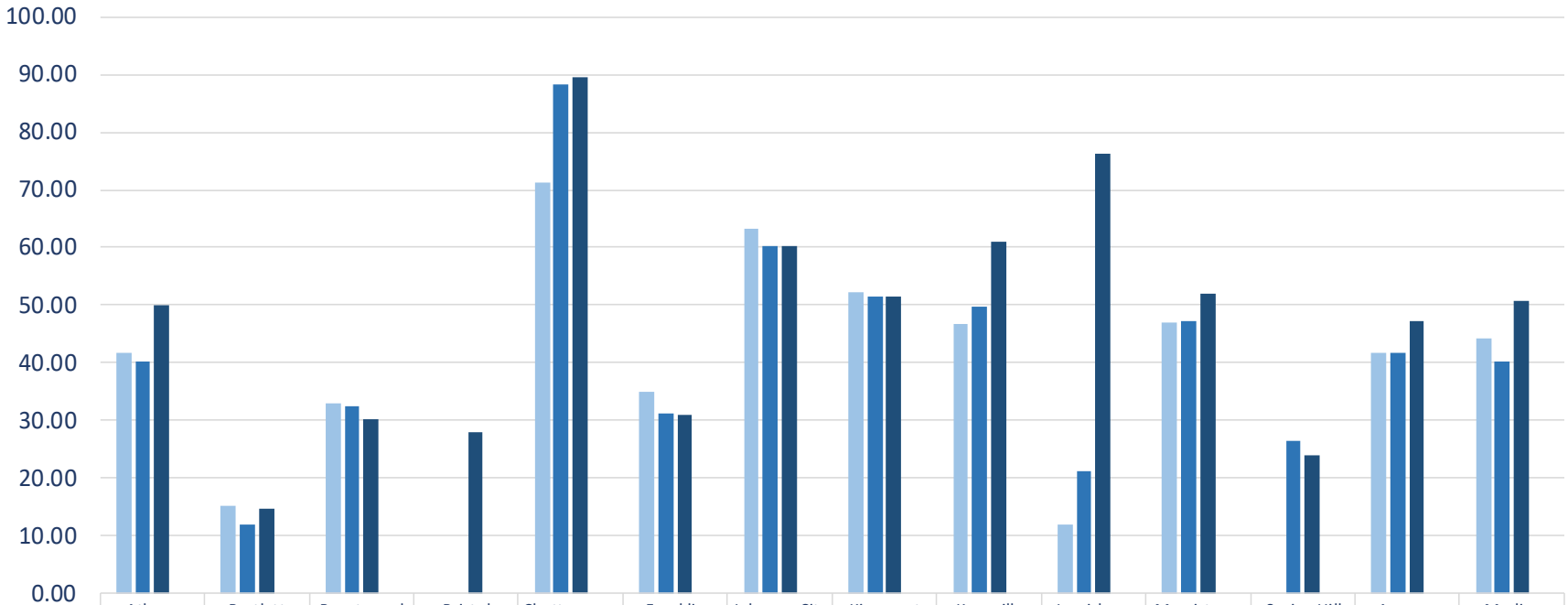
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	14.60%	15.73%	13.84%		12.88%	12.79%	10.99%	16.30%	16.90%	22.66%	12.83%		14.95%	14.22%
FY17	15.37%	15.98%	12.37%		14.18%	13.66%	11.69%	16.38%	16.69%	8.73%	11.59%	14.85%	13.77%	14.18%
FY18	16.44%	16.82%	12.91%	16.48%	15.51%	12.84%	11.55%	16.38%	17.59%	5.18%	14.79%	15.53%	14.34%	15.52%
Percent change from FY17	6.96%	5.26%	4.37%		9.38%	-6.00%	-1.20%	0.00%	5.39%	-40.66%	27.61%	4.58%	4.09%	9.45%

Lewisburg FY16 data is included in the average and median.

Pentana PI code: P.PS038f

Police Services

Public Property Accidents per 1,000 Population — Workload Benchmark

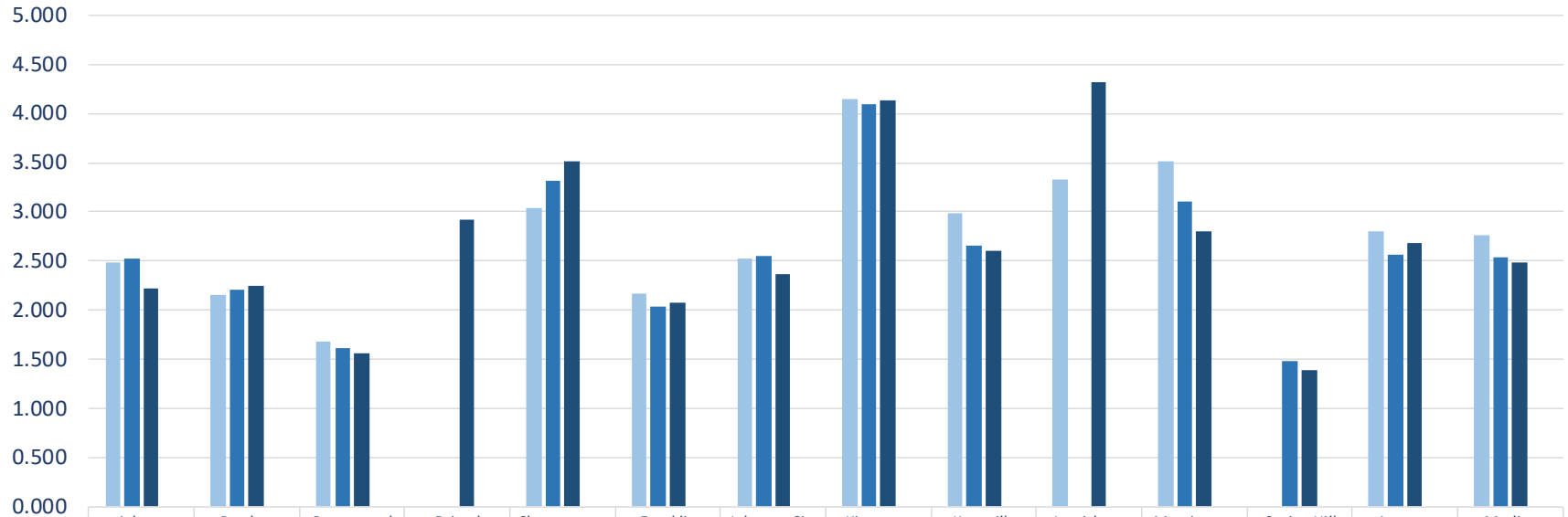


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	41.83	15.08	33.02		71.22	34.84	63.23	52.21	46.70	11.98	47.09		41.72	44.27
FY17	40.20	11.91	32.35		88.31	31.12	60.14	51.47	49.73	21.08	47.33	26.33	41.82	40.20
FY18	50.01	14.57	30.21	27.82	89.57	30.93	60.30	51.47	60.94	76.22	51.96	23.89	47.32	50.74
Percent change from FY17	24.40%	22.28%	-6.61%		1.43%	-0.61%	0.27%	0.00%	22.54%	261.57%	9.78%	-9.27%	13.17%	26.22%

Pentana PI code: P.PS036f

Police Services

Police FTE per 1,000 Population — Resource Benchmark

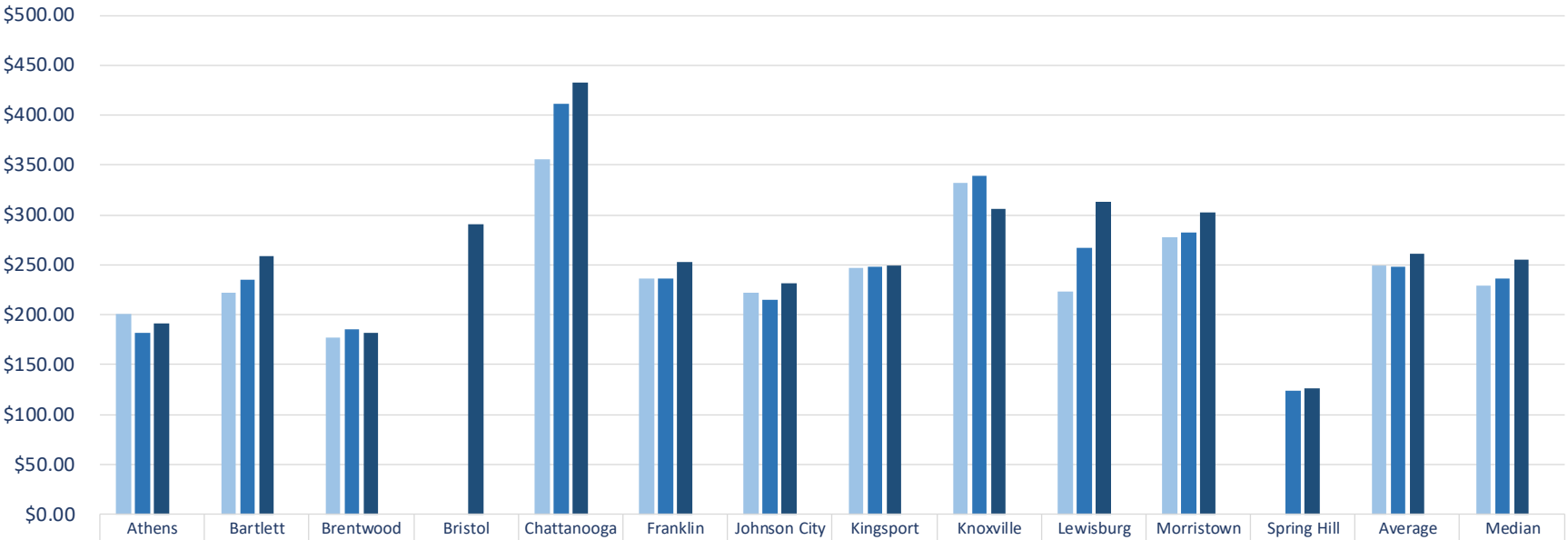


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	2.480	2.157	1.678		3.037	2.170	2.518	4.144	2.991	3.333	3.518		2.803	2.755
FY17	2.520	2.204	1.606		3.322	2.031	2.549	4.100	2.656		3.103	1.480	2.557	2.535
FY18	2.220	2.246	1.554	2.921	3.513	2.073	2.359	4.139	2.600	4.323	2.799	1.385	2.678	2.480
Percent change from FY17	-11.90%	1.91%	-3.24%		5.75%	2.07%	-7.45%	0.95%	-2.11%		-9.80%	-6.42%	4.71%	-2.17%

Pentana PI code: C.PS032f

Police Services

Total Police Cost per Capita — Resource Benchmark

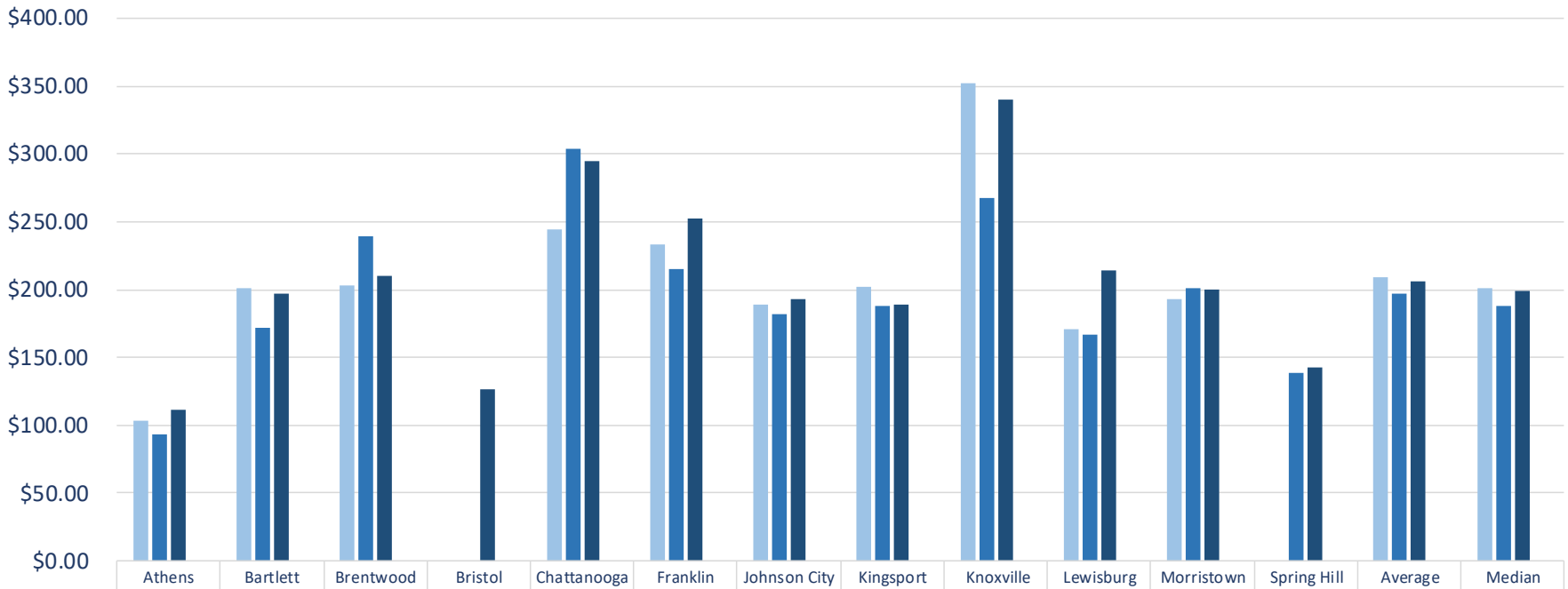


	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$201.14	$222.61	$176.77		$355.42	$236.23	$222.52	$247.12	$332.46	$223.13	$277.28		$249.47	$229.68
FY17	$182.44	$235.54	$185.71		$411.42	$236.74	$215.13	$248.35	$338.84	$267.53	$282.16	$123.78	$247.97	$236.74
FY18	$191.22	$258.25	$181.89	$291.07	$433.04	$252.92	$231.57	$249.75	$305.95	$312.99	$302.58	$125.88	$261.43	$255.59
Percent change from FY17	4.81%	9.64%	-2.06%		5.25%	6.83%	7.64%	0.56%	-9.71%	16.99%	7.24%	1.70%	5.43%	7.96%

Pentana PI code: C.PS070f

Police Services

Cost per Call for Service — Efficiency Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$103.49	$200.86	$203.22		$244.97	$233.71	$188.77	$202.14	$352.09	$170.70	$192.99		$209.29	$201.50
FY17	$93.09	$172.16	$239.03		$304.42	$214.76	$182.12	$187.62	$267.67	$166.72	$201.52	$139.06	$197.11	$187.62
FY18	$111.04	$197.50	$210.03	$126.94	$295.23	$252.94	$193.48	$188.69	$339.79	$214.34	$200.63	$142.65	$206.11	$199.07
Percent change from FY17	19.28%	14.72%	-12.13%		-3.02%	17.78%	6.24%	0.57%	26.94%	28.56%	-0.44%	2.58%	4.57%	6.10%

Pentana PI code: P.PS040f

PROPERTY MAINTENANCE CODE ENFORCEMENT SERVICES

MEDIANS FOR FY18

THINGS TO CONSIDER:

Cities indicate a variety of arrangements in allocating building and property maintenance codes enforcement, building inspections, and planning and zoning functions among departmental units.

In some cities, these functions are handled in single, integrated departments, while in others the functions are housed in separate departments.

The property maintenance code enforcement cost per capita **$4.98**

$77.94 is the cost per inspection

The average number of days from complaint to first inspection **1.56**

87.88% Percentage of violations brought into compliance as a percent of all violations

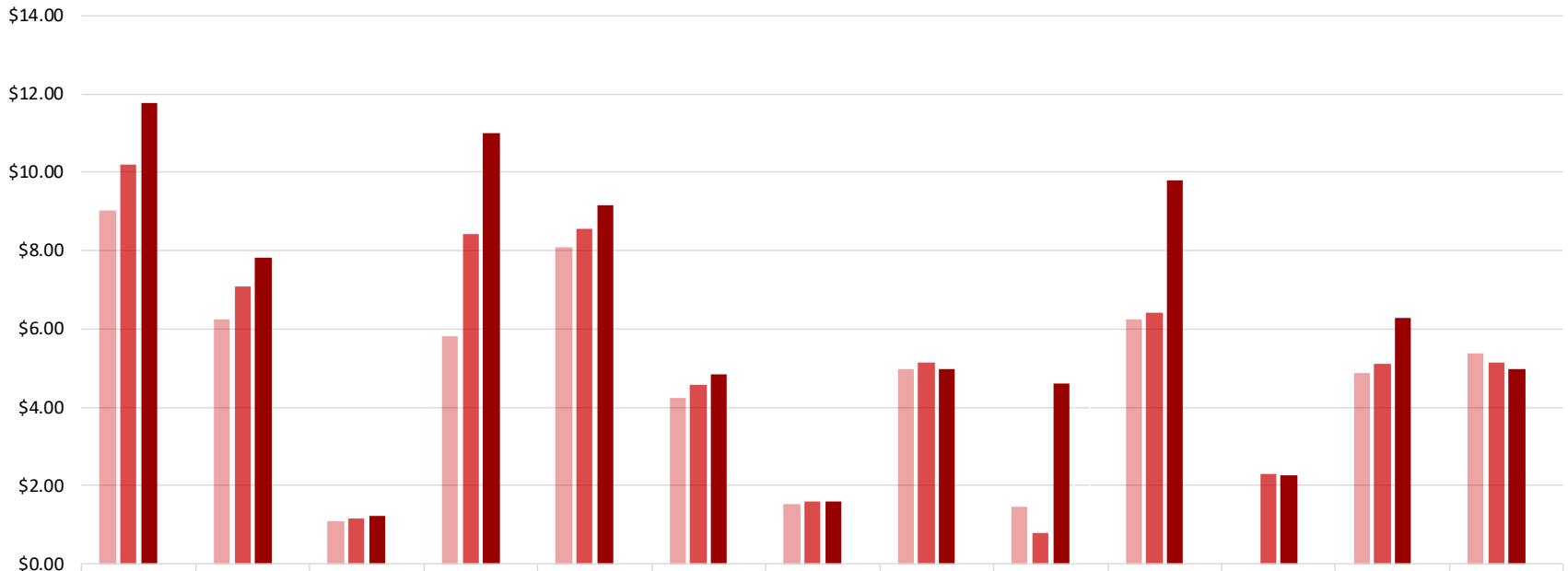
ALSO IN THIS SECTION:

- Inspections per 1,000 parcels
- Inspections per Property Maintenance FTE
- Property code enforcement cost per parcel

TMBP
TENNESSEE MUNICIPAL BENCHMARKING PROJECT

Property Maintenance Code Enforcement Services

Property Maintenance Code Enforcement Program Cost per Capita — Resource Benchmark



	Athens	Bartlett	Brentwood	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$9.02	$6.23	$1.10	$5.80	$8.09	$4.24	$1.52	$4.97	$1.46	$6.24		$4.87	$5.39
FY17	$10.21	$7.08	$1.16	$8.43	$8.55	$4.57	$1.58	$5.13	$0.78	$6.41	$2.31	$5.11	$5.13
FY18	$11.76	$7.82	$1.23	$10.99	$9.15	$4.84	$1.60	$4.98	$4.60	$9.79	$2.25	$6.27	$4.98
Percent Change from FY17	15.18%	10.45%	6.03%	30.37%	7.02%	5.91%	1.27%	-2.92%	489.74%	52.73%	-2.60%	22.77%	-2.92%

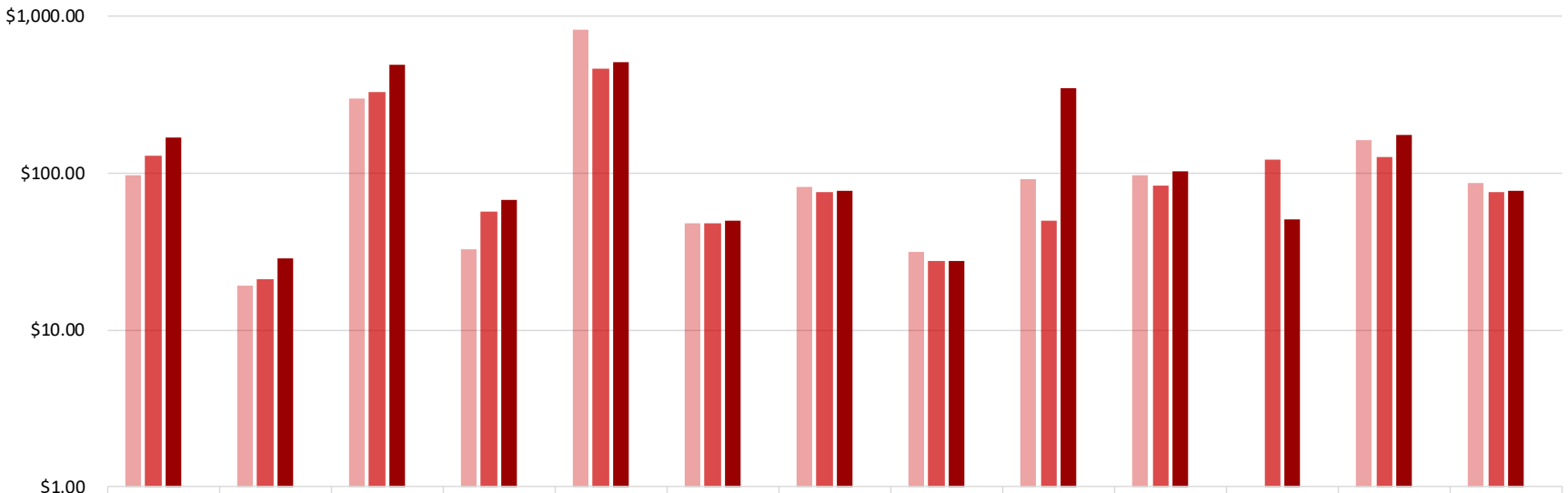
Bristol does not report costs in this service area.

Morristown high percentage increase from FY2017 to FY2018 due to cost of demolition contract being relocated from building code costs to property maintenance costs.

Pentana PI code: P.PM027f

Property Maintenance Code Enforcement Services

Cost per Property Maintenance Inspection — Resource Benchmark



	Athens	Bartlett	Brentwood	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$97.25	$19.24	$302.24	$32.67	$819.25	$47.78	$81.86	$31.57	$92.56	$96.37		$162.08	$87.21
FY17	$129.39	$21.23	$331.12	$57.48	$462.75	$47.67	$75.68	$27.36	$49.73	$82.85	$121.64	$127.90	$75.68
FY18	$170.39	$28.75	$496.70	$67.63	$511.81	$50.14	$77.94	$27.51	$347.30	$103.23	$51.24	$175.69	$77.94
Percent Change from FY17	31.69%	35.42%	50.01%	17.66%	10.60%	5.18%	2.99%	0.55%	598.37%	24.60%	-57.88%	37.37%	2.99%

While substantially higher than the average and median, Brentwood and Franklin are still include in the median and average calculations.

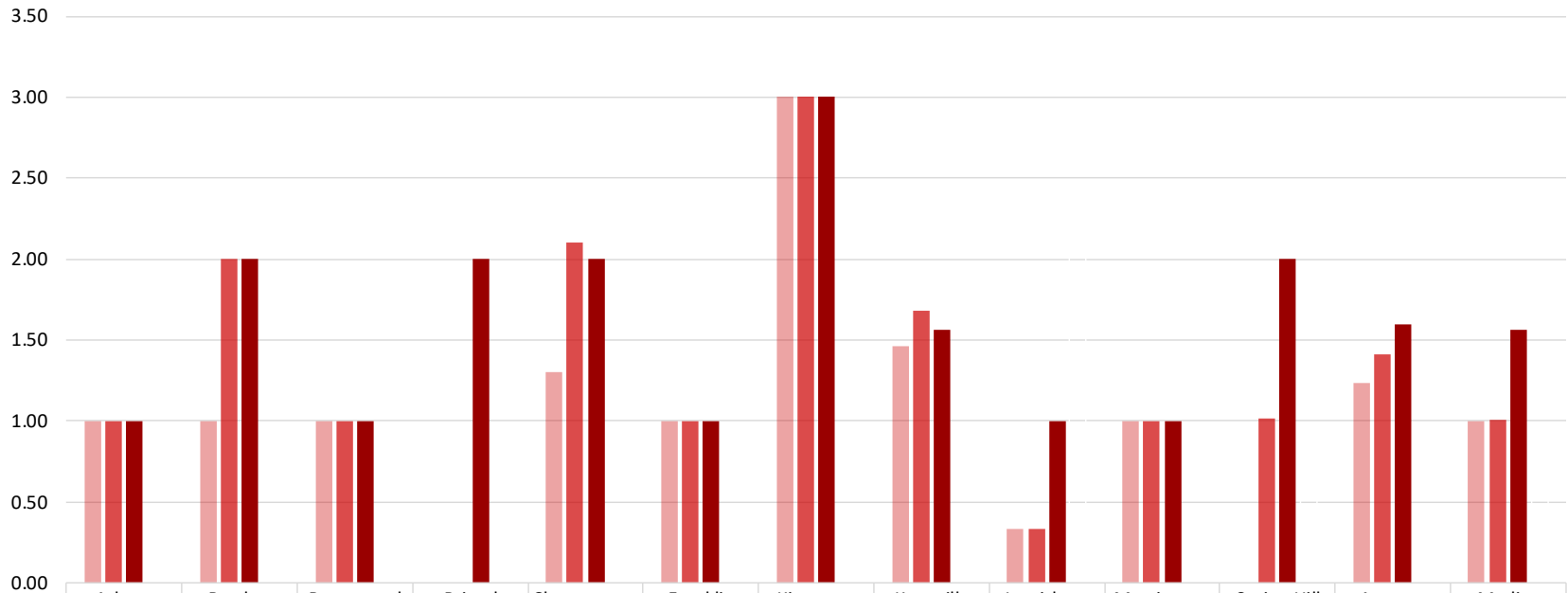
Bristol does not report cost information in this service area.

Morristown high percentage increase from FY2017 to FY2018 due to cost of demolition contract being relocated from building code costs to property maintenance costs.

Pentana PI code: P.PM028f

Property Maintenance Code Enforcement Services

Average Number of Days from Complaint to First Inspection — Efficiency Benchmark



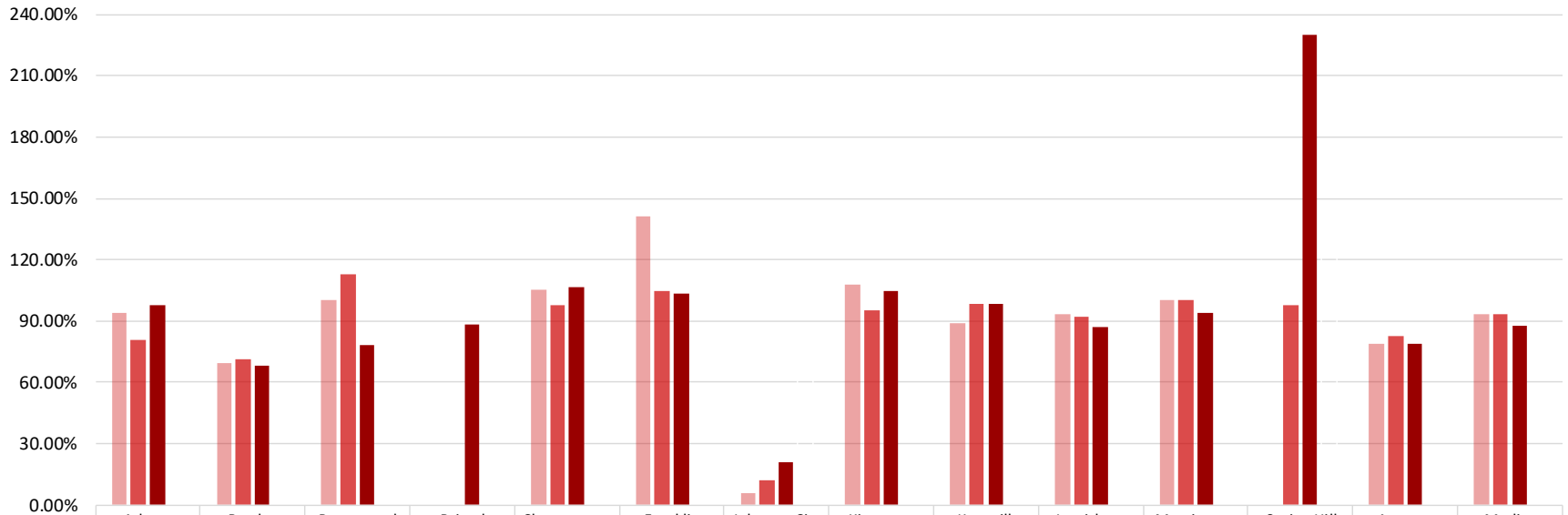
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	1.00	1.00	1.00		1.30	1.00	3.00	1.46	0.33	1.00		1.23	1.00
FY17	1.00	2.00	1.00		2.10	1.00	3.00	1.68	0.33	1.00	1.02	1.41	1.01
FY18	1.00	2.00	1.00	2.00	2.00	1.00	3.00	1.56	1.00	1.00	2.00	1.60	1.56
Percent Change from FY17	0.00%	0.00%	0.00%		-4.76%	0.00%	0.00%	-7.14%	203.03%	0.00%	96.08%	12.98%	54.46%

Kingsport is included in the average and median.

Pentana PI code: P.PM002

Property Maintenance Code Enforcement Services

Violations Brought into Compliance as a Percent of All Property Maintenance Violations — Effectiveness Measures



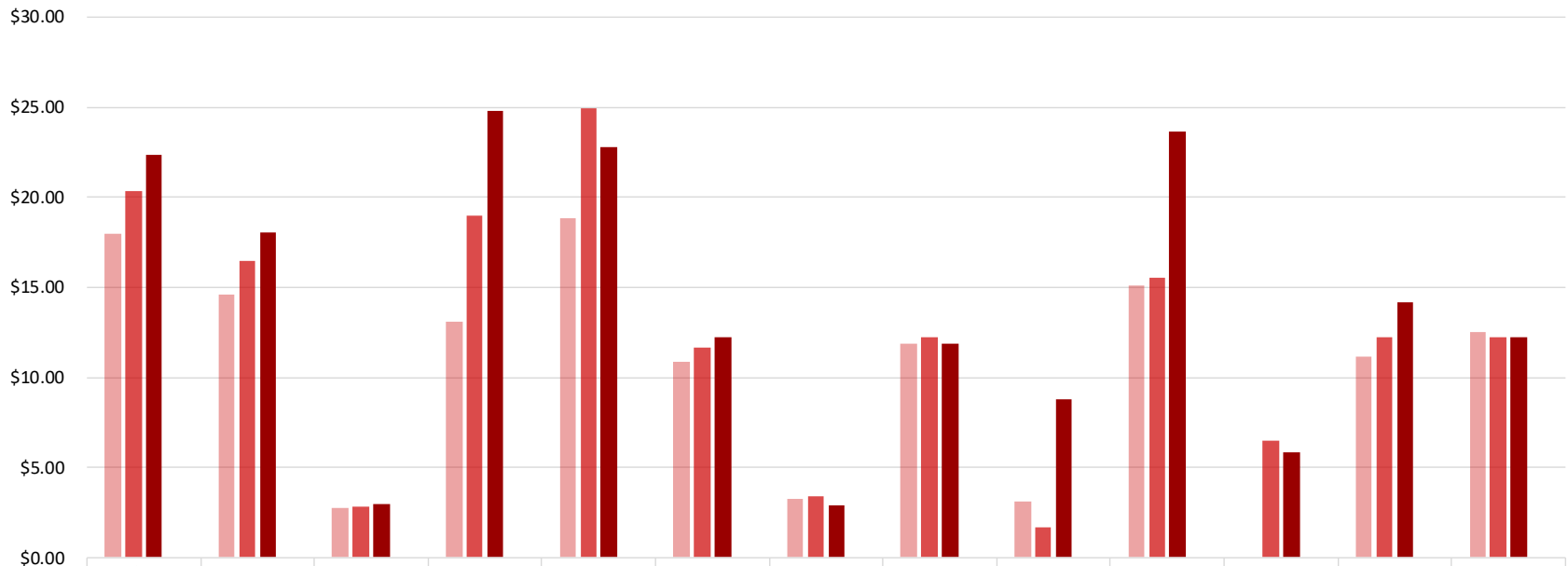
	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	94.10%	69.46%	100.00%		105.17%	140.95%	6.11%	107.89%	88.85%	93.52%	100.00%		78.86%	93.52%
FY17	80.70%	71.54%	112.70%		98.03%	104.96%	12.33%	94.97%	98.11%	92.11%	100.00%	97.84%	82.85%	93.54%
FY18	98.01%	68.12%	78.00%	88.52%	106.51%	103.71%	20.63%	104.78%	98.47%	87.23%	93.78%	230.09%	79.10%	87.88%
Percent Change from FY17	21.45%	-4.78%	-30.79%		8.65%	-1.19%	67.32%	10.33%	0.37%	-5.30%	-6.22%	135.17%	-4.53%	-6.06%

If cities count violations that originated in a previous fiscal year in PM005 and this results in a percentage here that is higher than 100%, that city's information will be excluded from the average and median. Brentwood, Chattanooga, Franklin, Kingsport and Spring Hill all report percentages over 100% and are excluded from the average and median for those years.

Pentana PI code: P.PM026f

Property Maintenance Code Enforcement Services

Property Maintenance Inspections per 1,000 Parcel — Workload Benchmark



	Athens	Bartlett	Brentwood	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$17.95	$14.57	$2.73	$13.09	$18.87	$10.90	$3.24	$11.88	$3.14	$15.09		$11.15	$12.49
FY17	$20.36	$16.46	$2.85	$19.01	$24.94	$11.68	$3.37	$12.24	$1.69	$15.51	$6.49	$12.24	$12.24
FY18	$22.35	$18.07	$2.98	$24.80	$22.80	$12.20	$2.88	$11.90	$8.81	$23.62	$5.84	$14.20	$12.20
Percent Change from FY17	9.77%	9.78%	4.56%	30.46%	-8.58%	4.45%	-14.54%	-2.78%	421.30%	52.29%	-10.02%	16.08%	-0.33%

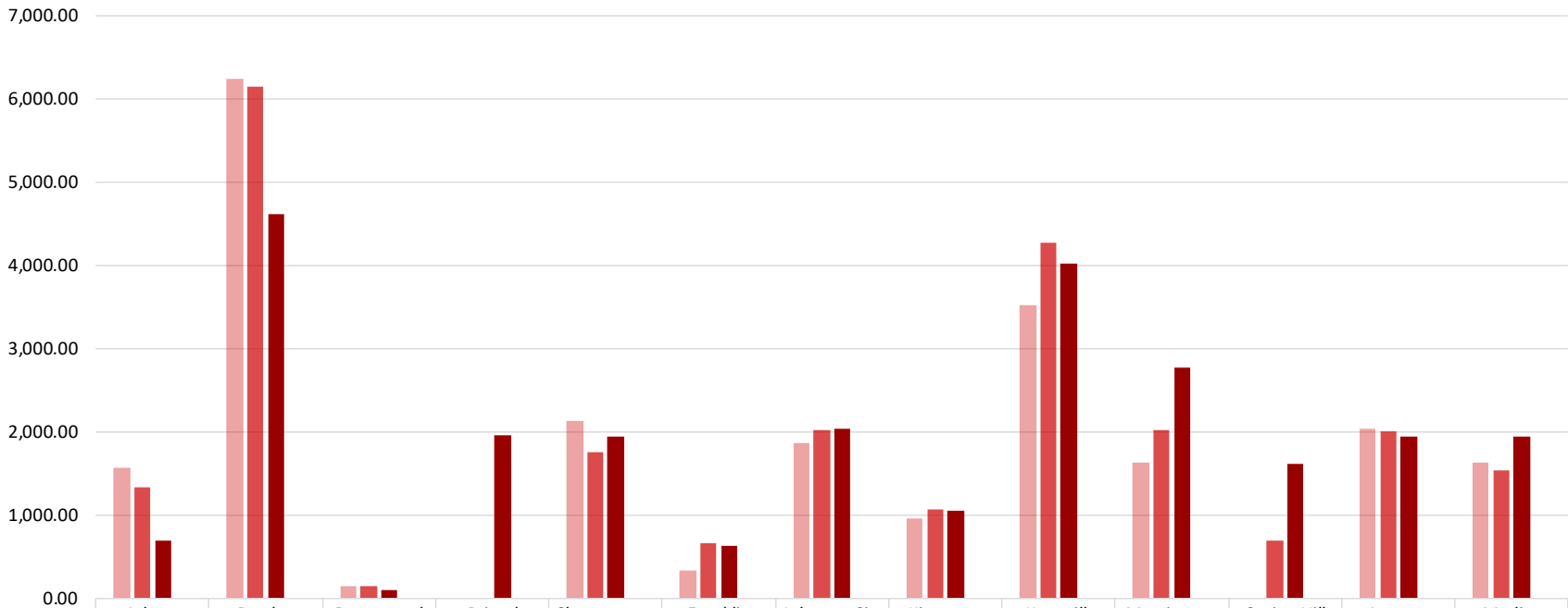
Bartlett is included in the average and median.

Morristown high percentage increase from FY2017 to FY2018 due to cost of demolition contract being relocated from building code costs to property maintenance costs.

Pentana PI code: P.PM021f

Property Maintenance Code Enforcement Services

Inspections per Property Maintenance Inspector FTEs — Efficiency Benchmark



	Athens	Bartlett	Brentwood	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Spring Hill	Average	Median
FY16	1,560.00	6,244.71	147.00		2,126.36	327.50	1,866.00	951.00	3,518.63	1,624.78		2,040.66	1,624.78
FY17	1,327.50	6,155.56	142.00		1,755.93	655.00	2,017.67	1,073.00	4,269.55	2,014.29	695.00	2,010.55	1,541.71
FY18	688.15	4,612.01	100.00	1,954.00	1,946.43	633.50	2,034.00	1,053.00	4,023.60	2,764.00	1,606.00	1,946.79	1,946.43
Percent Change from FY17	-48.16%	-25.08%	-29.58%		10.85%	-3.28%	0.81%	-1.86%	-5.76%	37.22%	131.08%	-3.17%	26.25%

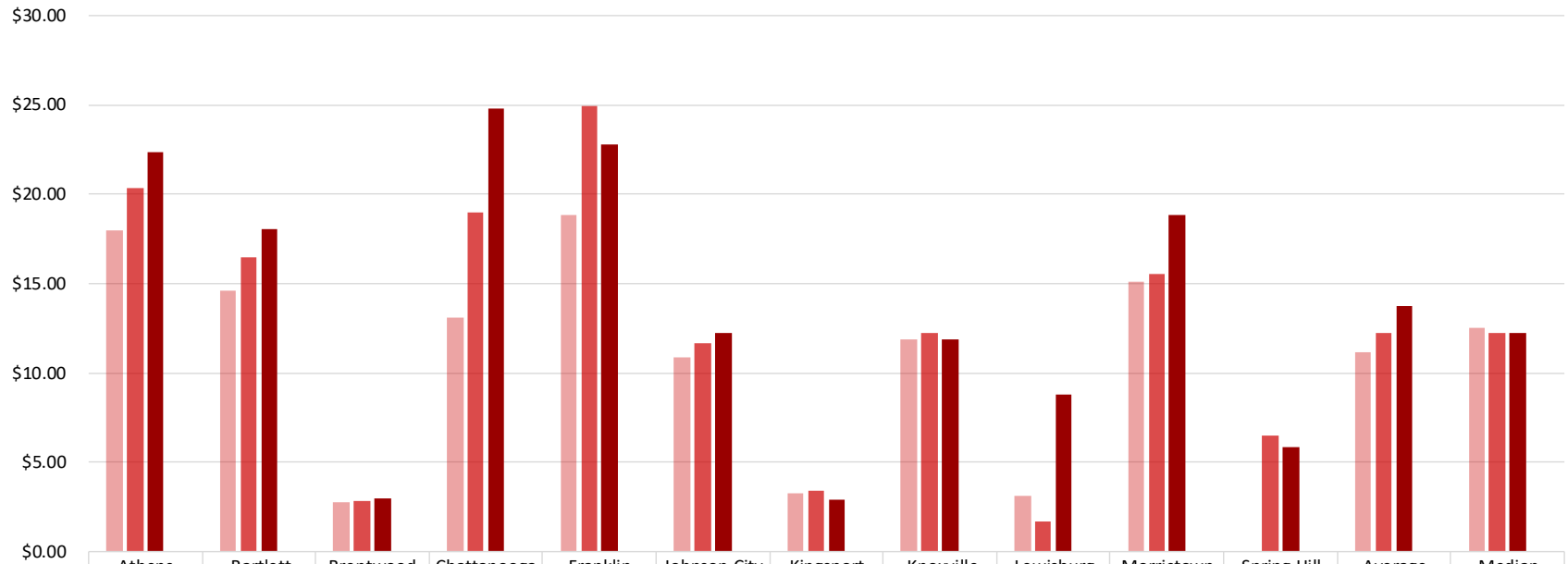
Spring Hill explains the increase in inspections per FTE as related to the growth of the city. Also, note that Spring Hill only reports 1 FTE for this service area.

Bartlett is included in the average and median.

Pentana PI code: P.PM023f

Property Maintenance Code Enforcement Services

Property Maintenance Code Enforcement Program Cost per Parcel — Efficiency Benchmark



	Athens	Bartlett	Brentwood	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Lewisburg	Morristown	Spring Hill	Average	Median
FY16	$17.95	$14.57	$2.73	$13.09	$18.87	$10.90	$3.24	$11.88	$3.14	$15.09		$11.15	$12.49
FY17	$20.36	$16.46	$2.85	$19.01	$24.94	$11.68	$3.37	$12.24	$1.69	$15.51	$6.49	$12.24	$12.24
FY18	$22.35	$18.07	$2.98	$24.80	$22.80	$12.20	$2.88	$11.90	$8.81	$18.87	$5.84	$13.77	$12.20
Percent Change from FY17	9.77%	9.78%	4.56%	30.46%	-8.58%	4.45%	-14.54%	-2.78%	421.30%	21.66%	-10.02%	12.56%	-0.33%

Bristol does not report cost data for this service area. Lewisburg reported a corresponding percentage increase in costs from FY17 to FY18.

Pentana PI code: P.PM022f

REFUSE, COLLECTION, DISPOSAL, RECYCLING SERVICES
MEDIANS FOR FY18

THINGS TO CONSIDER:

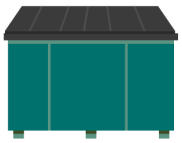
Residential refuse collection is the routine collection of household refuse from residential premises.

Small businesses may be included if they use containers small enough to move or lift manually and if their pickups are done on the same schedule as residential collection.

Transportation of refuse to the disposal site (landfill or transfer station) is included along with disposal costs (tipping fees). Some cities enjoy free tipping fees, while others pay a fixed price per ton disposed.

Some cites do not provide garbage collection services at all; citizens contract directly with private vendors.

Cities that do provide refuse and recycling services provide those services differently – some provide a drop-off site, while others provide curb-side pick up.



The residential refuse cost per ton collected **$176.06**

$256.03 is the recycling cost per ton collected

336.18 tons diverted from Class 1 landfills per 1,000 people

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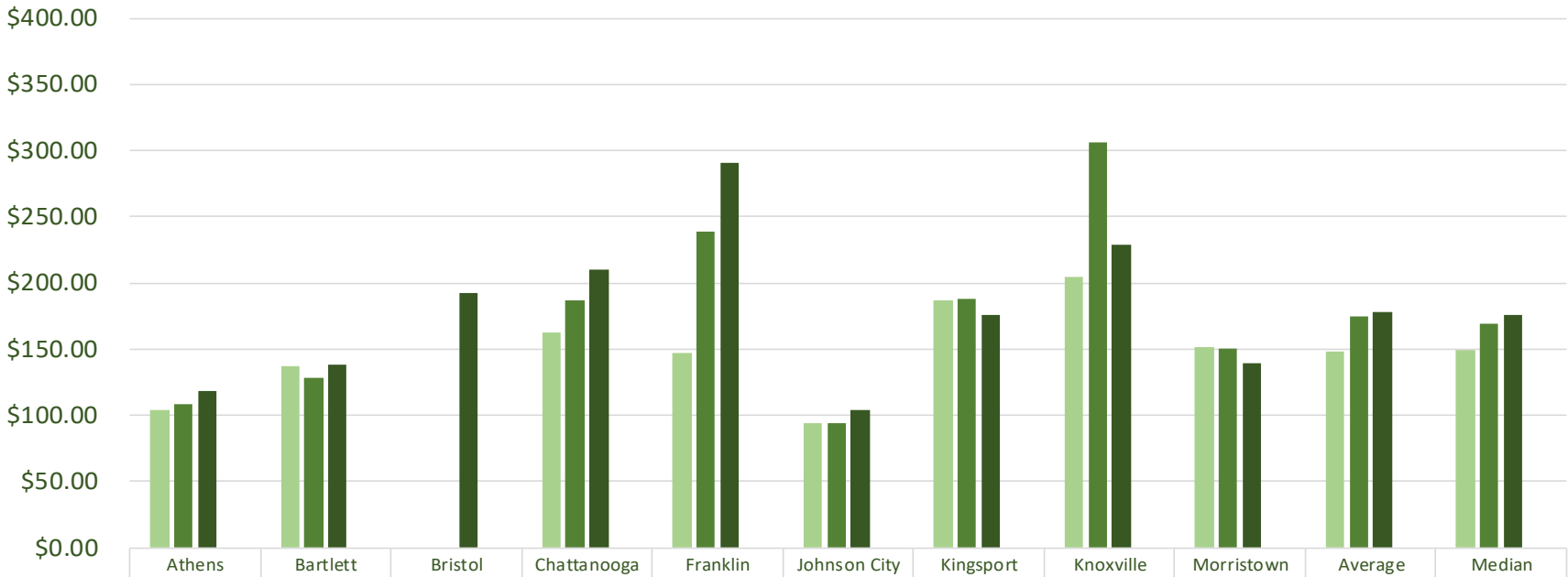
ALSO IN THIS SECTION:

- Tons of residential refuse collected per FTE
- Tons of recyclables collected per FTE
- Tons of residential refuse collected per 1,000 people
- Recycling cost per capita
- Refuse cost per capita

Refuse Collection, Disposal, and Recycling Services

Residential Refuse Cost per Ton Collected — Efficiency Benchmark



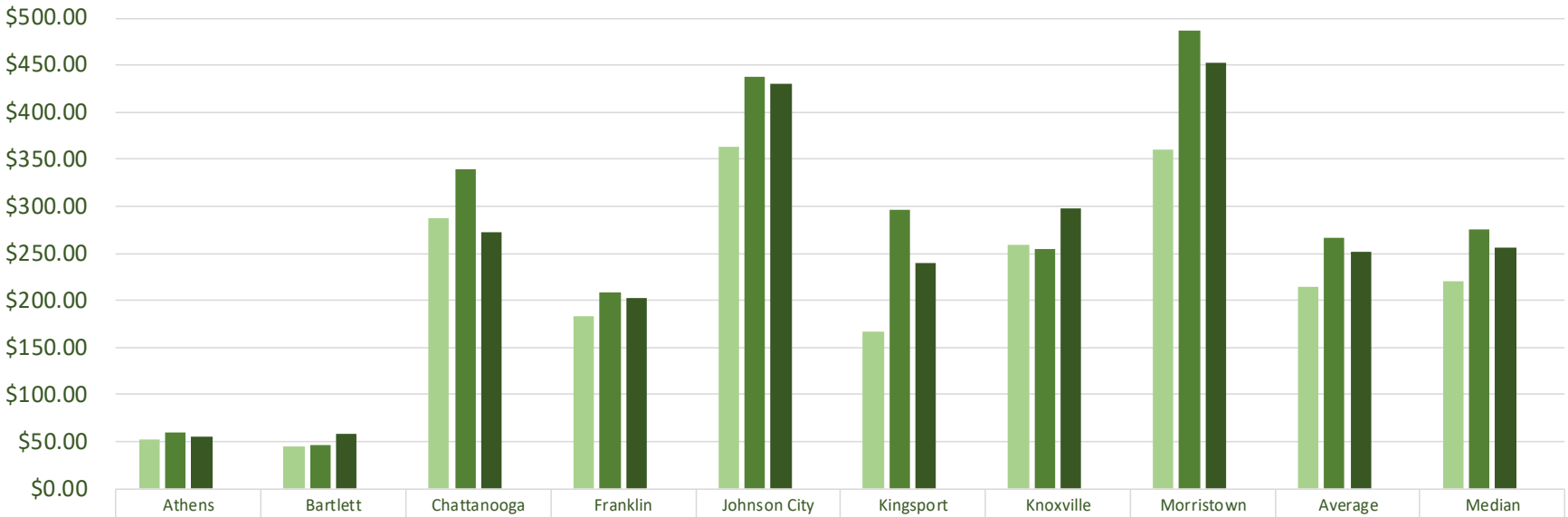
	Athens	Bartlett	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Average	Median
FY16	$103.78	$137.49		$162.52	$147.20	$93.63	$186.68	$204.84	$151.86	$148.50	$149.53
FY17	$108.86	$128.19		$186.90	$238.32	$93.49	$187.88	$306.15	$150.40	$175.02	$168.65
FY18	$118.75	$138.77	$192.09	$209.96	$291.06	$104.21	$176.06	$228.44	$139.59	$177.66	$176.06
Percent Change from FY17	9.09%	8.25%		12.34%	22.13%	11.47%	-6.29%	-25.38%	-7.19%	1.51%	4.39%

Note from Knoxville regarding the drop from FY17 to FY18: A purchase of approximately 68,000 gallon trash and recycling carts in FY2017 caused the spike in costs.

Pentana PI code: P.RF045f

Refuse Collection, Disposal, and Recycling Services

Recycling Cost per Ton Collected — Efficiency Benchmark



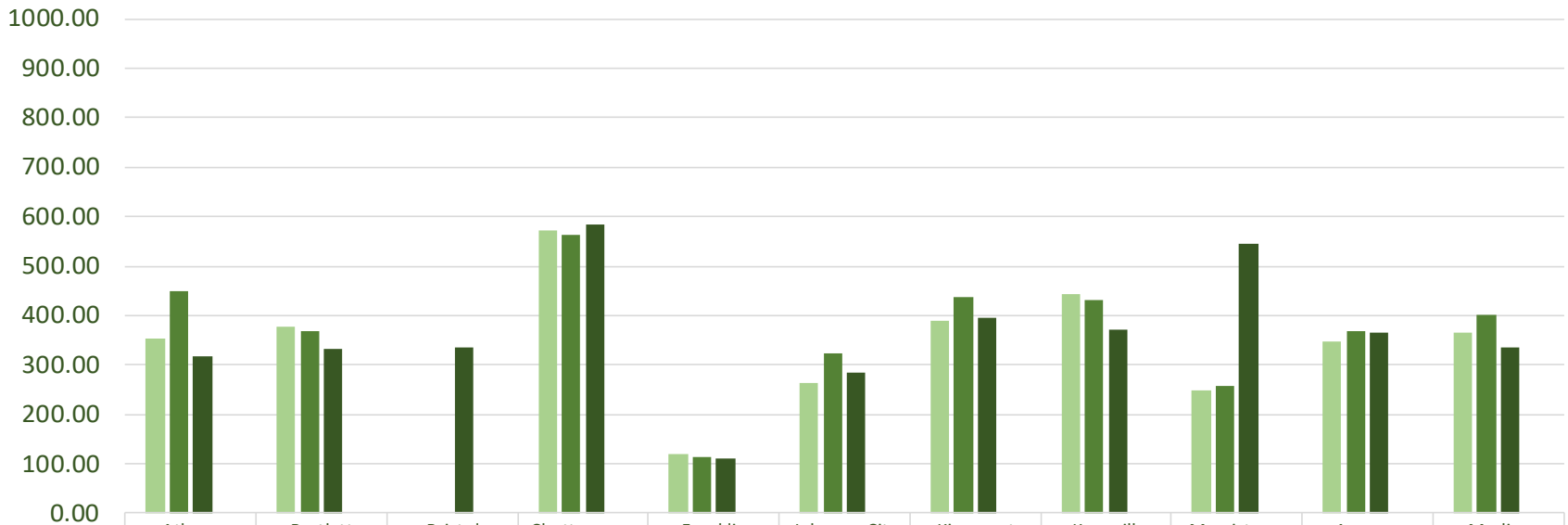
	Athens	Bartlett	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Average	Median
FY16	$51.61	$44.47	$287.93	$182.69	$363.57	$165.96	$258.30	$360.68	$214.40	$220.50
FY17	$58.95	$46.54	$339.47	$207.61	$437.87	$296.88	$253.91	$487.24	$266.06	$275.40
FY18	$55.26	$57.78	$272.57	$202.87	$429.74	$239.49	$298.17	$452.40	$251.04	$256.03
Percent Change from FY17	-6.26%	24.15%	-19.71%	-2.28%	-1.86%	-19.33%	17.43%	-7.15%	-5.65%	-7.03%

Athens and Bartlett were excluded from the average and median for all years as both cities provide drop-off recycling services only. Knoxville is no longer collecting glass recyclables.

Pentana PI code: P.RF046f

Refuse Collection, Disposal, and Recycling Services

Tons Diverted from Class 1 Landfill per 1,000 Population — Effectiveness Benchmark



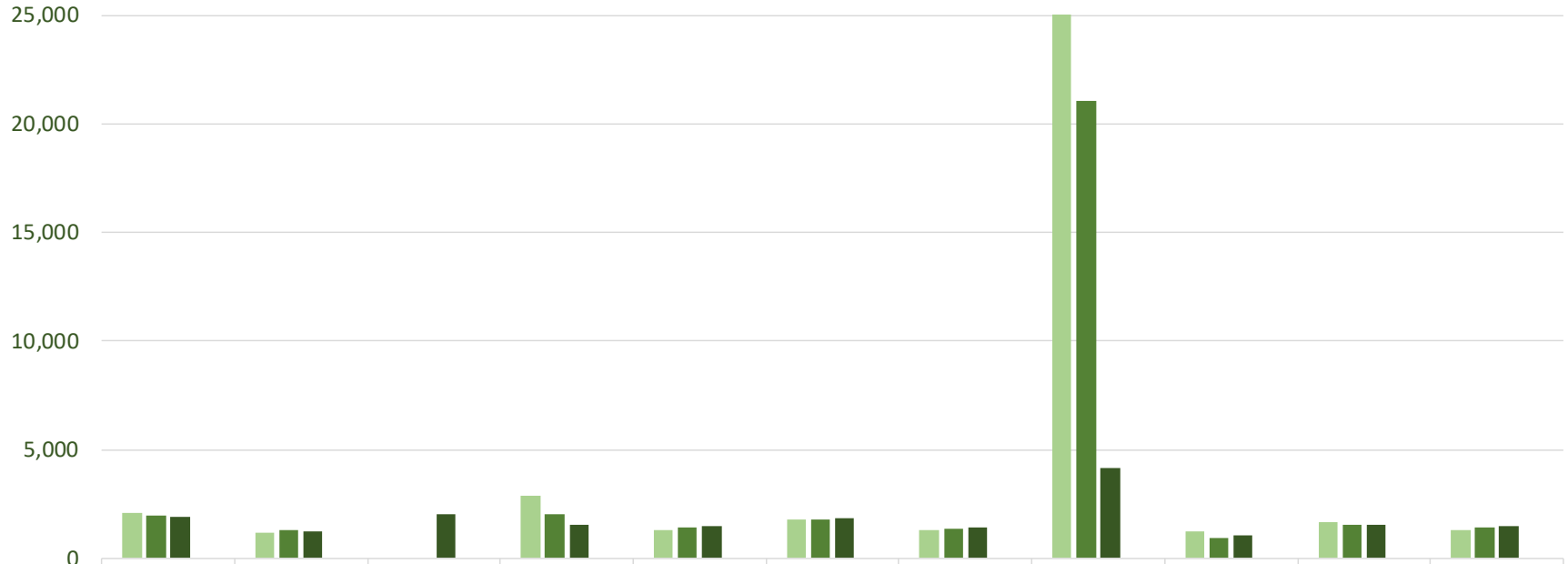
	Athens	Bartlett	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Average	Median
FY16	353.75	376.73		571.58	119.09	264.49	387.92	443.77	248.17	345.69	365.24
FY17	450.25	368.84		563.20	113.50	323.20	436.75	431.80	256.03	367.95	400.32
FY18	317.36	331.61	336.18	584.56	111.06	285.34	395.07	370.06	544.70	363.99	336.18
Percent Change from FY17	-29.51%	-10.09%		3.79%	-2.15%	-11.71%	-9.54%	-14.30%	112.75%	-1.07%	-16.02%

Knoxville is no longer collecting glass recyclables.

Pentana PI code: P.RF034f

Refuse Collection, Disposal, and Recycling Services

Tons of Residential Refuse Collected per FTE (Solid Waste) — Efficiency Benchmark



	Athens	Bartlett	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Average	Median
FY16	2,062.63	1,195.76		2,860.03	1,316.00	1,784.40	1,282.80	25,200.00	1,231.32	1,676.13	1,316.00
FY17	1,937.05	1,275.48		2,050.20	1,395.00	1,784.50	1,346.47	21,092.00	945.23	1,533.42	1,395.00
FY18	1,880.00	1,245.71	1,996.79	1,529.29	1,461.21	1,819.60	1,387.73	4,131.79	1,075.30	1,549.45	1,495.25
Percent Change from FY17	-2.95%	-2.33%		-25.41%	4.75%	1.97%	3.06%	-80.41%	13.76%	1.05%	7.19%

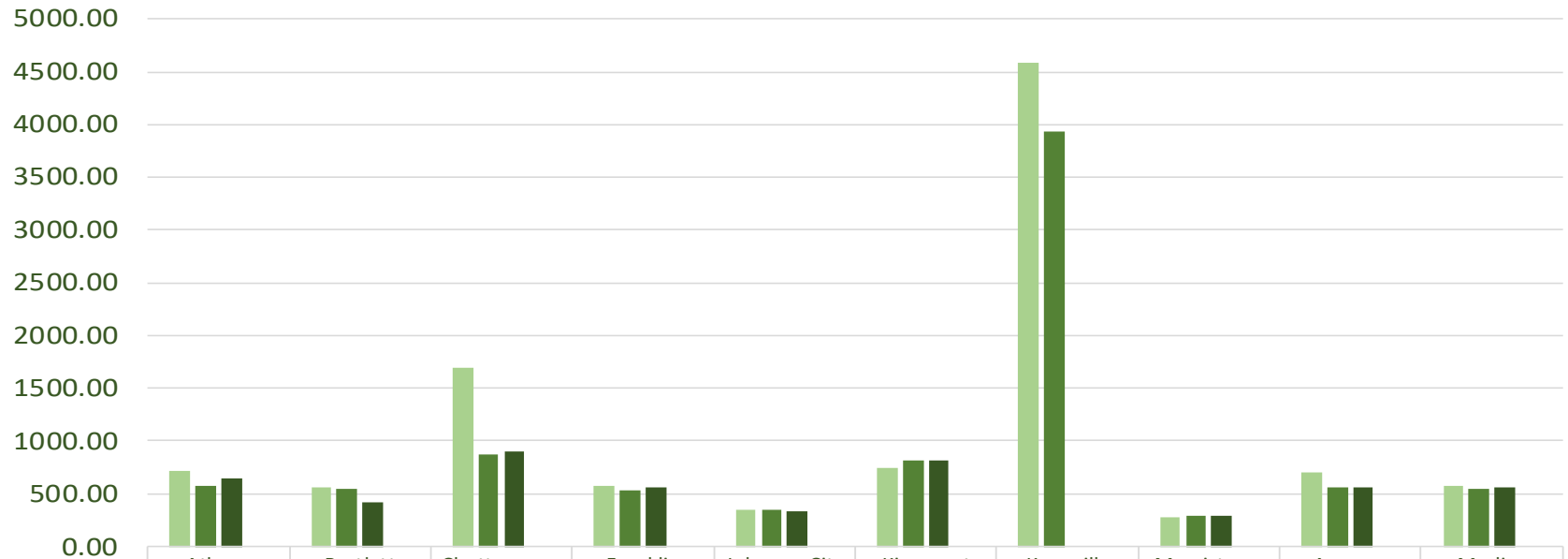
In the FY2018 data, Knoxville began reporting their recycling FTEs with the refuse FTEs since they collect downtown refuse and recycling with a small, single city crew. The rest of the refuse and recycling in Knoxville is collected by Waste Management. FTEs for refuse account for the Waste Management crews. Additionally the tonnage collected is reduced from last year which is likely attributed to the "Contents of Cart" program implemented in FY2018.

Knoxville is excluded from the average and the median for all three years.

Pentana PI code: P.RF037f

Refuse Collection, Disposal, and Recycling Services

Tons of Recyclables Collected per Recycling FTE — Efficiency Benchmark



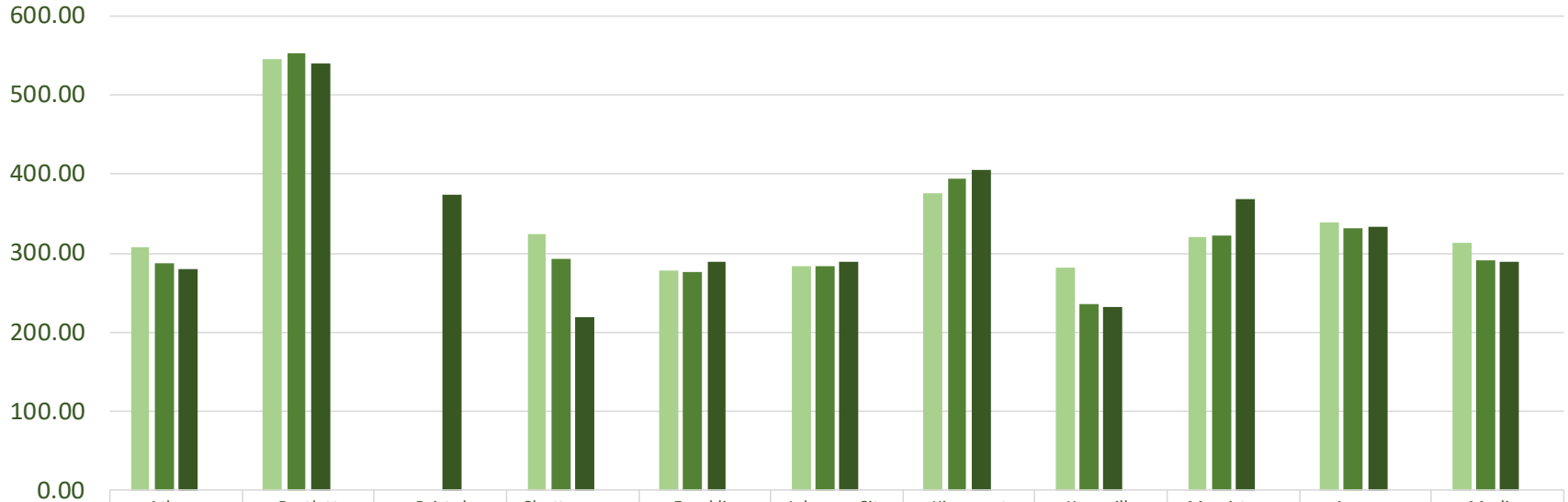
	Athens	Bartlett	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Average	Median
FY16	722.09	566.98	1693.29	577.33	348.80	744.25	4584.44	276.74	704.21	577.33
FY17	569.75	545.29	872.01	528.83	347.80	810.00	3932.06	285.71	565.63	545.29
FY18	643.01	413.02	903.96	553.33	329.20	819.00		283.58	563.59	553.33
Percent Change from FY17	12.86%	-24.26%	3.66%	4.63%	-5.35%	1.11%		-0.75%	-0.36%	1.47%

Knoxville is excluded from the average and the median since they report both recycling and refuse FTEs in the refuse FTE number. For the FY2018 data, Knoxville recycling FTEs are now reported with the refuse FTEs. Knoxville is also no longer collecting glass recyclables.

Pentana PI code: P.RF038f

Refuse Collection, Disposal, and Recycling Services

Tons of Residential Refuse Collected per 1,000 Population — Workload Benchmark

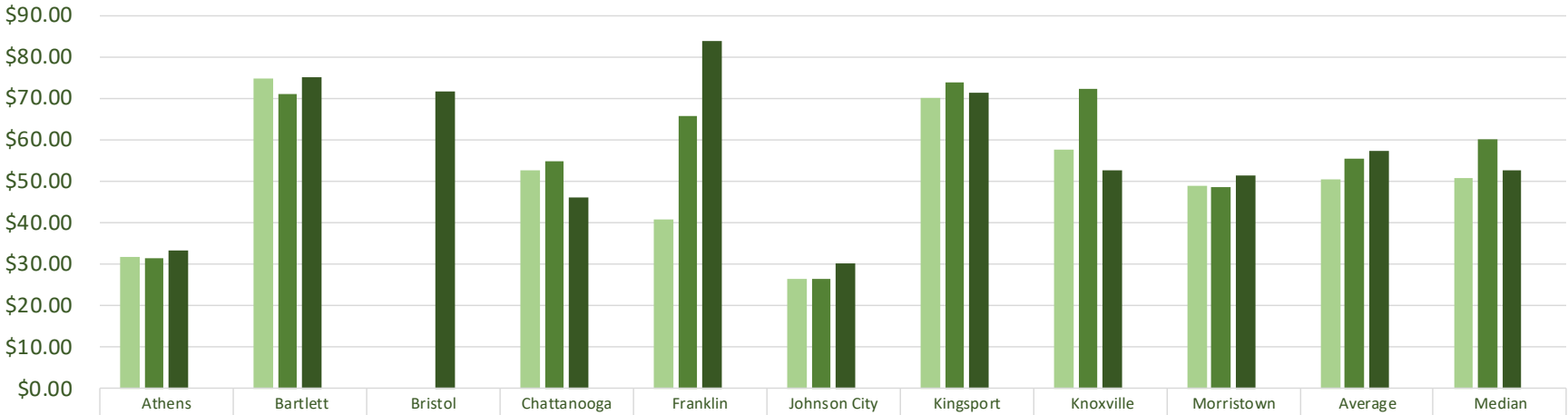


	Athens	Bartlett	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Average	Median
FY16	306.53	544.66		324.08	277.60	282.56	375.28	281.76	321.17	339.21	313.85
FY17	287.87	553.43		293.45	275.43	282.57	393.90	235.83	322.78	330.66	290.66
FY18	279.39	540.29	373.90	218.89	288.50	288.13	405.98	230.99	369.05	332.79	288.50
Percent Change from FY17	-2.95%	-2.37%		-25.41%	4.75%	1.97%	3.07%	-2.05%	14.33%	0.65%	-0.74%

Pentana PI code: P.RF032f

Refuse Collection, Disposal, and Recycling Services

Refuse Cost per Capita — Resource Benchmark



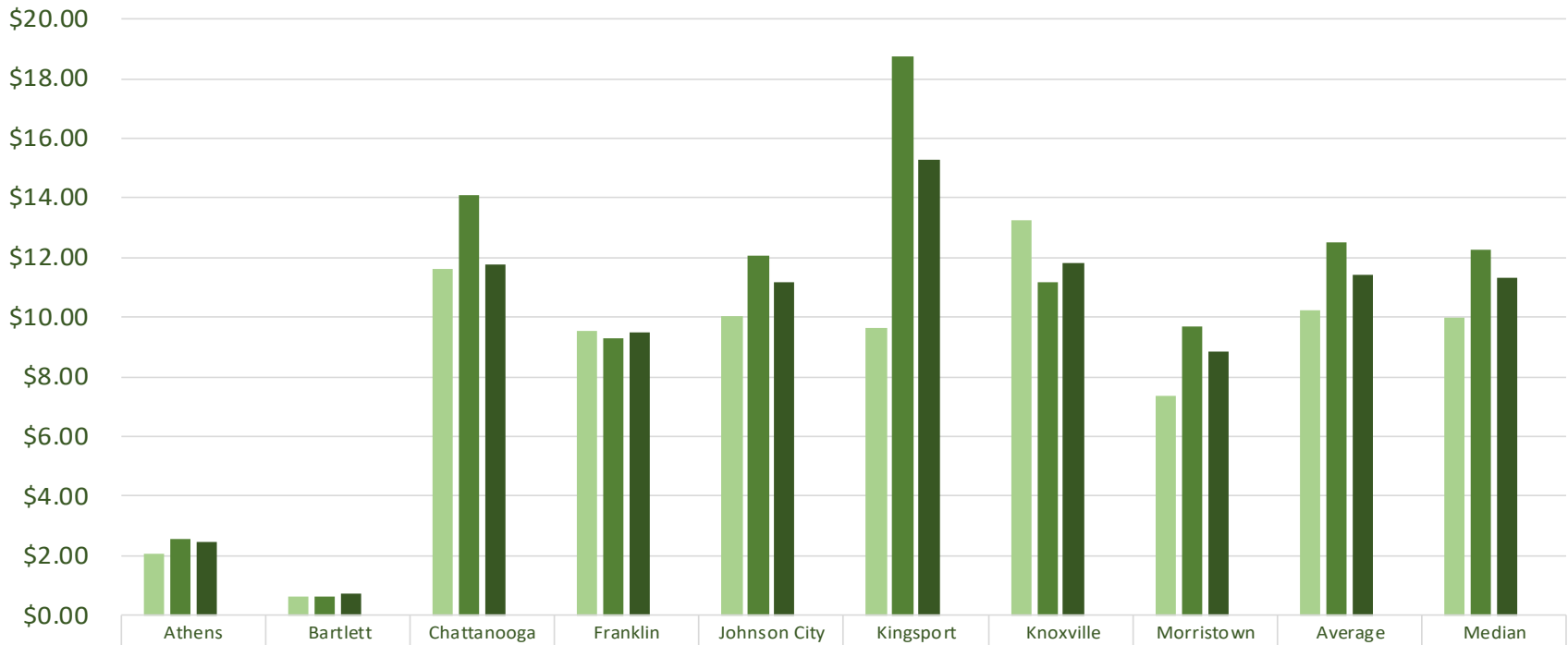
	Athens	Bartlett	Bristol	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Average	Median
FY16	$31.81	$74.89		$52.67	$40.86	$26.46	$70.06	$57.72	$48.77	$50.41	$50.72
FY17	$31.34	$70.94		$54.85	$65.64	$26.42	$74.00	$72.20	$48.55	$55.49	$60.25
FY18	$33.18	$74.98	$71.82	$45.96	$83.97	$30.03	$71.48	$52.77	$51.51	$57.30	$52.77
Percent Change from FY17	5.87%	5.69%		-16.21%	27.93%	13.66%	-3.41%	-26.91%	6.10%	3.26%	-12.41%

Note from Knoxville regarding the drop from FY17 to FY18: A purchase of approximately 68,000 gallon trash and recycling carts in FY2017 caused the spike.

Pentana PI code: C.RF067f

Refuse Collection, Disposal, and Recycling Services

Recycling Cost per Capita — Resource Benchmarks



	Athens	Bartlett	Chattanooga	Franklin	Johnson City	Kingsport	Knoxville	Morristown	Average	Median
FY16	$2.05	$0.62	$11.63	$9.54	$10.04	$9.64	$13.24	$7.37	$10.24	$10.01
FY17	$2.55	$0.64	$14.12	$9.29	$12.06	$18.76	$11.16	$9.70	$12.52	$12.25
FY18	$2.46	$0.71	$11.76	$9.50	$11.18	$15.30	$11.83	$8.85	$11.40	$11.34
Percent Change from FY17	-3.53%	10.94%	-16.71%	2.26%	-7.30%	-18.44%	6.00%	-8.76%	-8.88%	-7.38%

Note: Athens and Bartlett were excluded from the average and median for all years as both cities provide drop-off recycling services only.

Pentana PI code: C.RC067f

Appendix A. Member Demographic Charts

Demographic data on each of the participating cities is provided to illuminate some of the unique factors that can affect service levels and performance of those services. Readers of the report are encouraged to take the information presented here into thoughtful consideration when viewing the comparisons of the individual cities against the project averages for specific benchmarks.

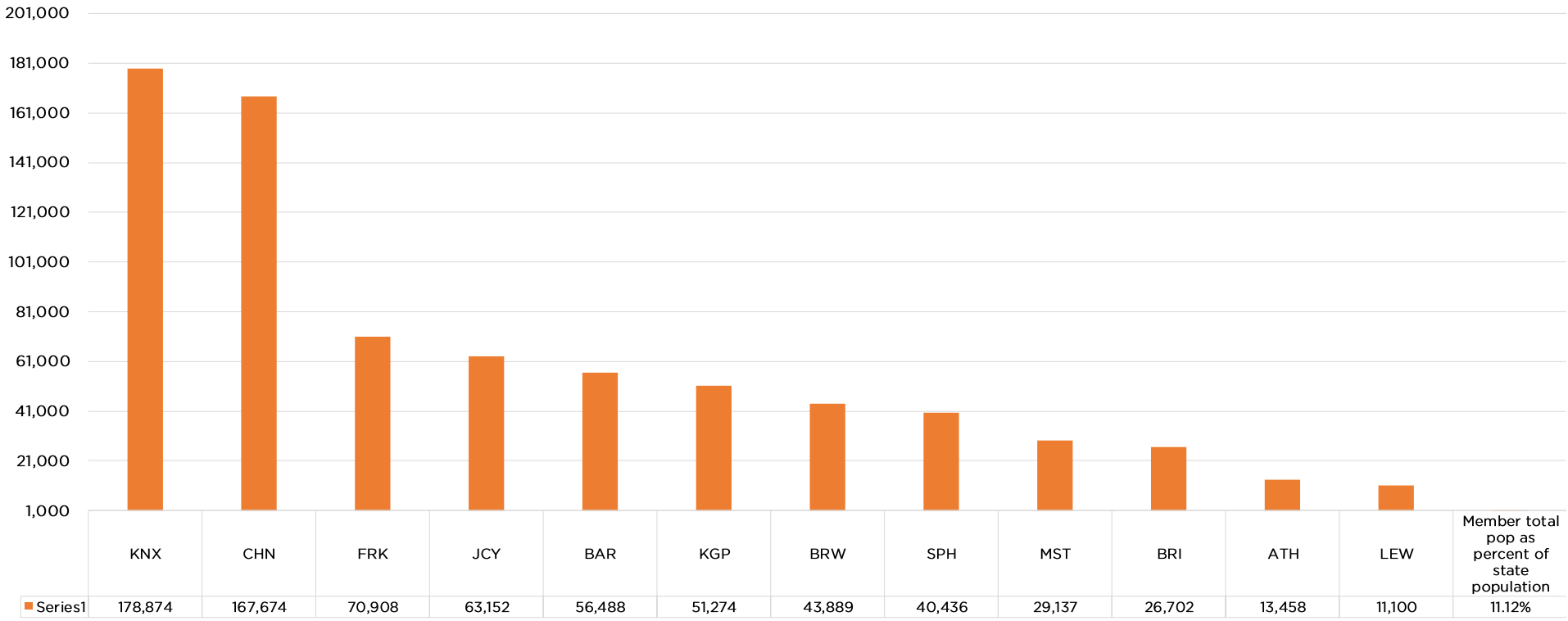
TMBP uses the Tennessee Department of Economic and Community Development Certified Populations rather than the decennial census counts. The numbers in use for this project cycle were certified as of July 1, 2018.

Charts provided:

- TN Certified Population
- Population per Square Mile
- City Jurisdiction in Square Miles
- Educational Attainment
- Median Household Income
- Per Capita Income
- Unemployment Rate by County
- Poverty Status in the Last 12 Months
- Renter-Occupied vs Owner-Occupied Properties
- Median Housing Values

Appendix A. Member Demographic Charts

State Certified Population as of July 1, 2018.



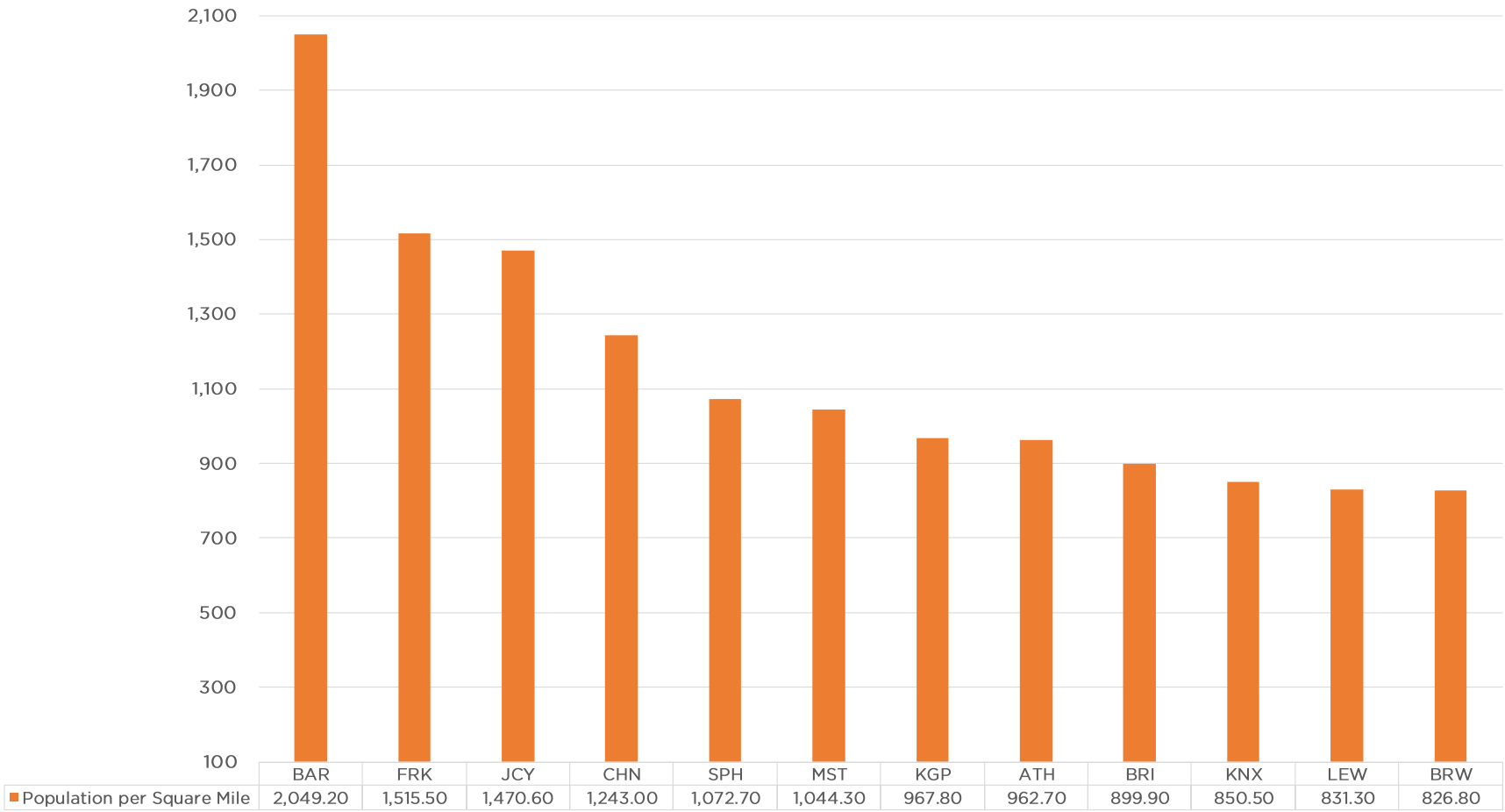
	KNX	CHN	FRK	JCY	BAR	KGP	BRW	SPH	MST	BRI	ATH	LEW	Member total pop as percent of state population
Series1	178,874	167,674	70,908	63,152	56,488	51,274	43,889	40,436	29,137	26,702	13,458	11,100	11.12%

State population: 6,770,010

Source: TN Department of Economic & Community Development.

Appendix A. Member Demographic Charts

Population per Square Mile, 2010

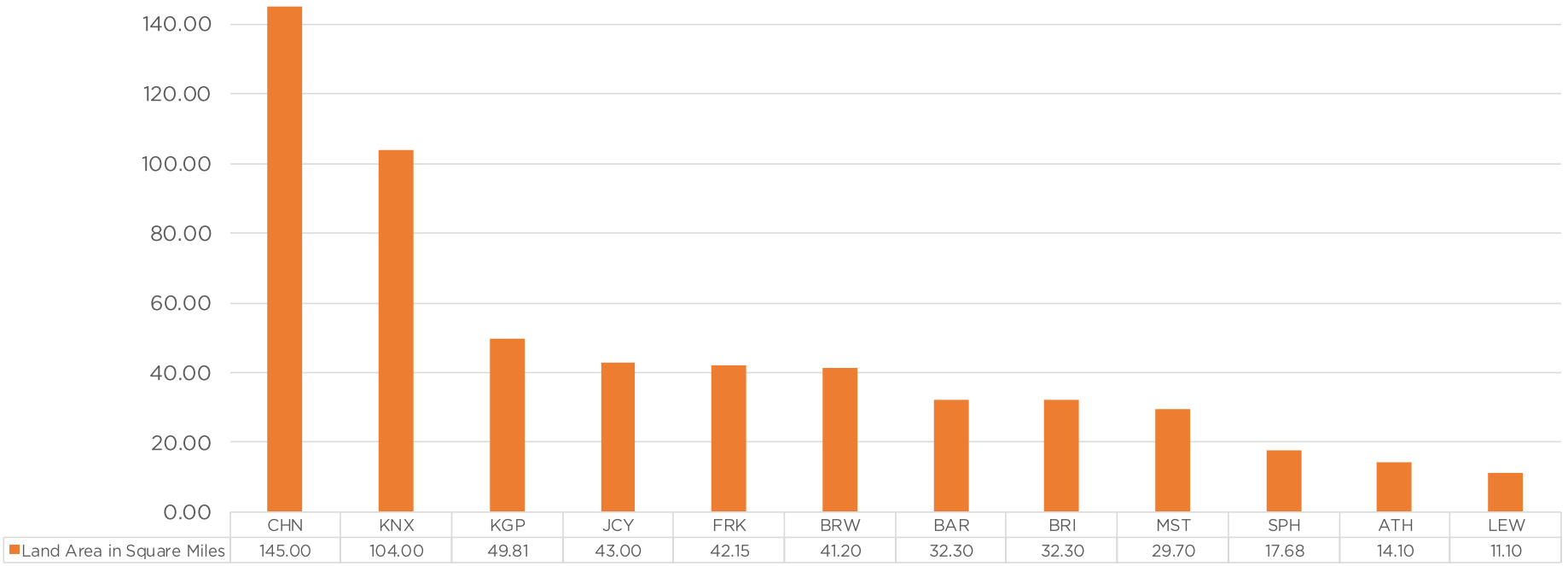


	BAR	FRK	JCY	CHN	SPH	MST	KGP	ATH	BRI	KNX	LEW	BRW
Population per Square Mile	2,049.20	1,515.50	1,470.60	1,243.00	1,072.70	1,044.30	967.80	962.70	899.90	850.50	831.30	826.80

Source: U.S. Census Bureau, 2010. These numbers will update in 2020.

Appendix A. Member Demographic Charts

City Jurisdiction Area in Square Miles

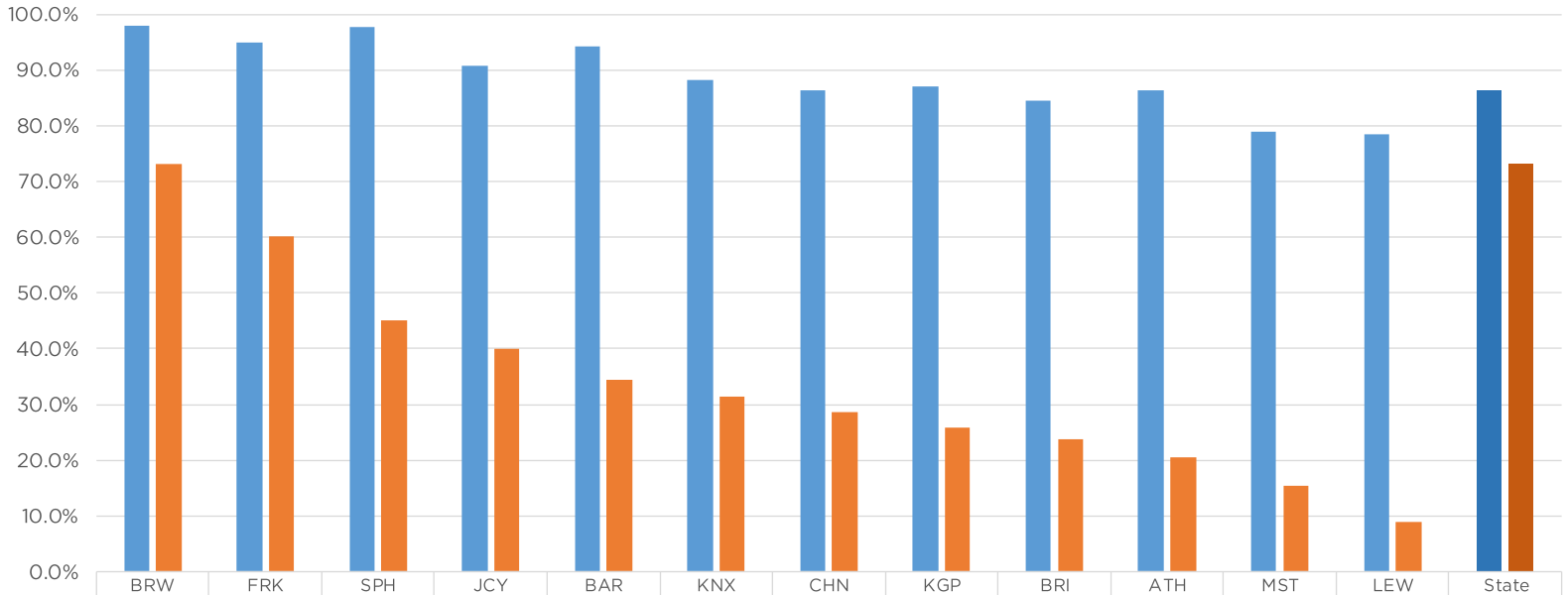


	CHN	KNX	KGP	JCY	FRK	BRW	BAR	BRI	MST	SPH	ATH	LEW
Land Area in Square Miles	145.00	104.00	49.81	43.00	42.15	41.20	32.30	32.30	29.70	17.68	14.10	11.10

Source: Data provided by member cities.

Appendix A. Member Demographic Charts

Educational Attainment, 2017

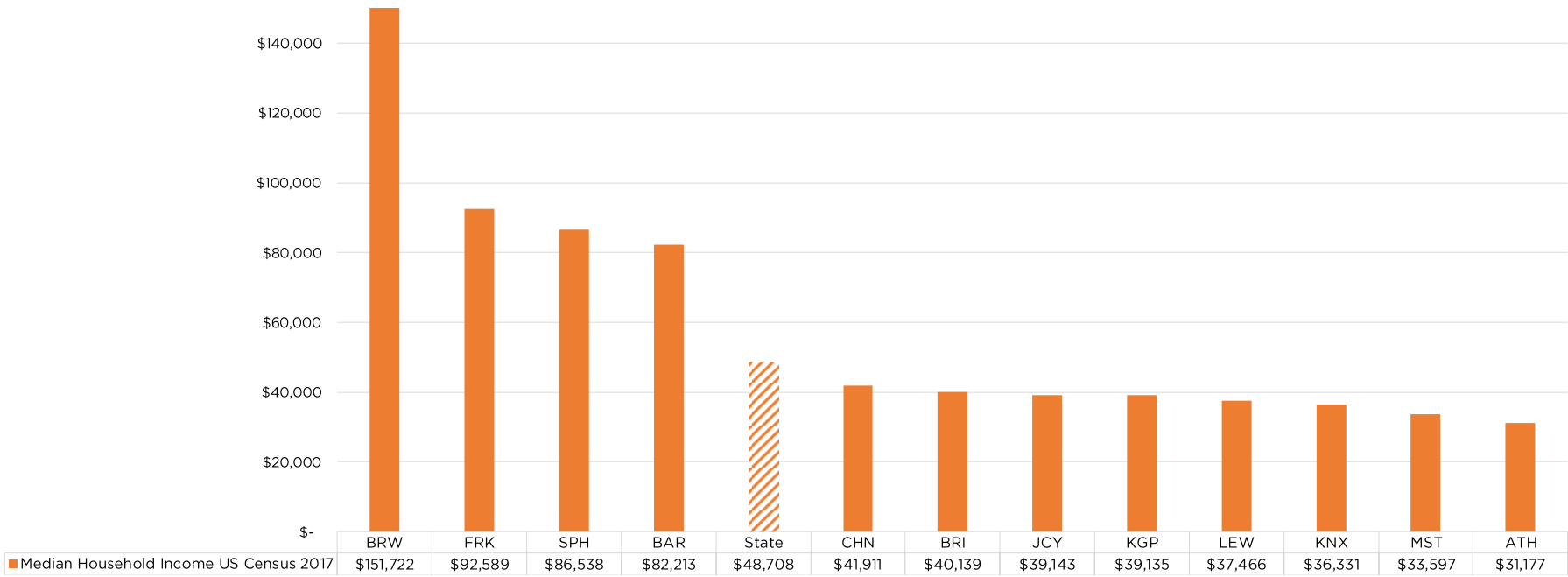


	BRW	FRK	SPH	JCY	BAR	KNX	CHN	KGP	BRI	ATH	MST	LEW	State
High School Graduate or Higher	98.1%	94.9%	97.7%	90.8%	94.3%	88.2%	86.5%	87.1%	84.6%	86.4%	78.9%	78.6%	86.5%
Bachelor's Degree or Higher	73.2%	60.2%	45.2%	40.1%	34.5%	31.4%	28.7%	25.8%	23.7%	20.4%	15.4%	8.9%	73.2%

Source: U.S Census Bureau. American Community Survey 5 Year Estimates.

Appendix A. Member Demographic Charts

Median Household Income, 2017

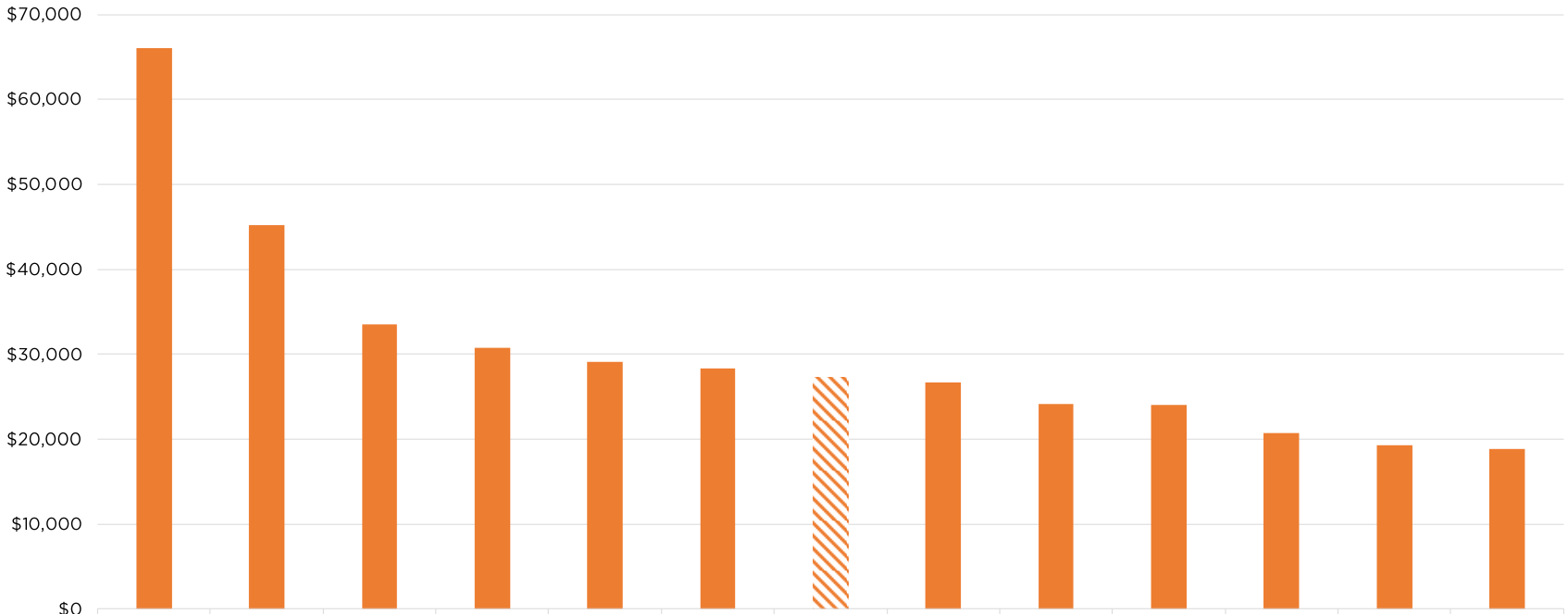


	BRW	FRK	SPH	BAR	State	CHN	BRI	JCY	KGP	LEW	KNX	MST	ATH
Median Household Income US Census 2017	$151,722	$92,589	$86,538	$82,213	$48,708	$41,911	$40,139	$39,143	$39,135	$37,466	$36,331	$33,597	$31,177

Source: U.S Census Bureau. American Community Survey.

Appendix A. Member Demographic Charts

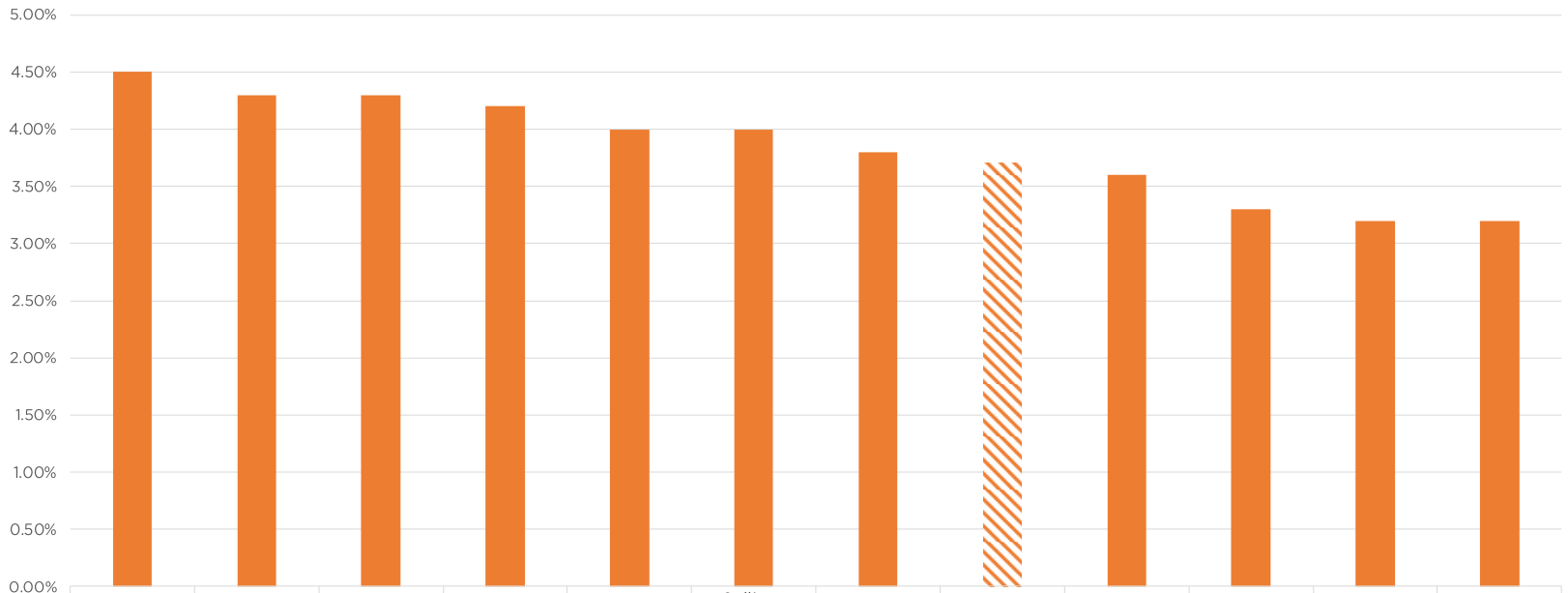
Per Capita Income, 2017



	BRW	FRK	BAR	SPH	JCY	KGP	State	CHN	KNX	BRI	ATH	LEW	MST
Per Capita Income	$66,106	$45,176	$33,527	$30,810	$29,115	$28,336	$27,277	$26,730	$24,185	$24,067	$20,688	$19,328	$18,908

Source: U.S Census Bureau. American Community Survey.

Unemployment Rate by County. Annual Average 2017

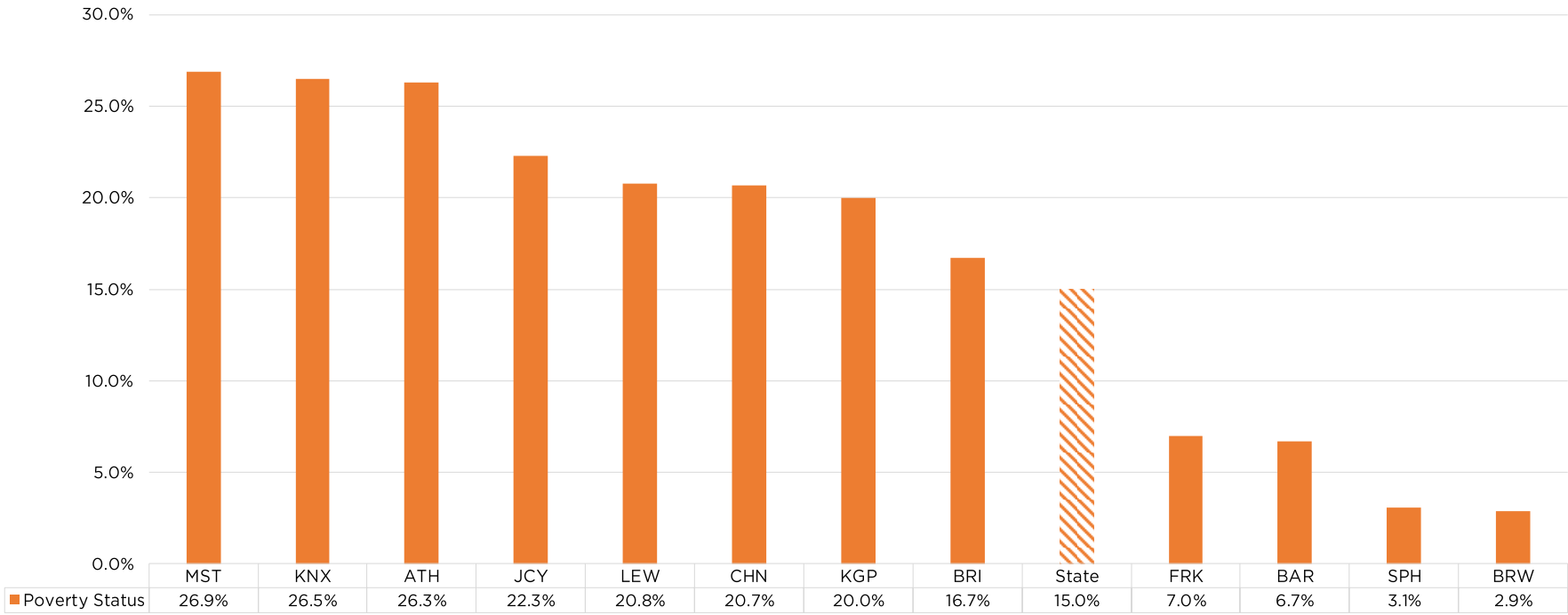


	Carter County (JCY)	McMinn County (ATH)	Shelby County (BAR)	Hawkins County (KGP)	Hamblen County (MST)	Sullivan County (BRI & KGP)	Washington County (JCY)	State	Hamilton County (CHN)	Marshall County (LEW)	Knox County (KNX)	Maury County (SPH)
Unemployment Rate by county	4.50%	4.30%	4.30%	4.20%	4.00%	4.00%	3.80%	3.70%	3.60%	3.30%	3.20%	3.20%

Source: U.S. Bureau of Labor Statistics. Local Area Unemployment Statistics (LAUS) Tables by County.

Appendix A. Member Demographic Charts

Poverty Status in the Last 12 Months



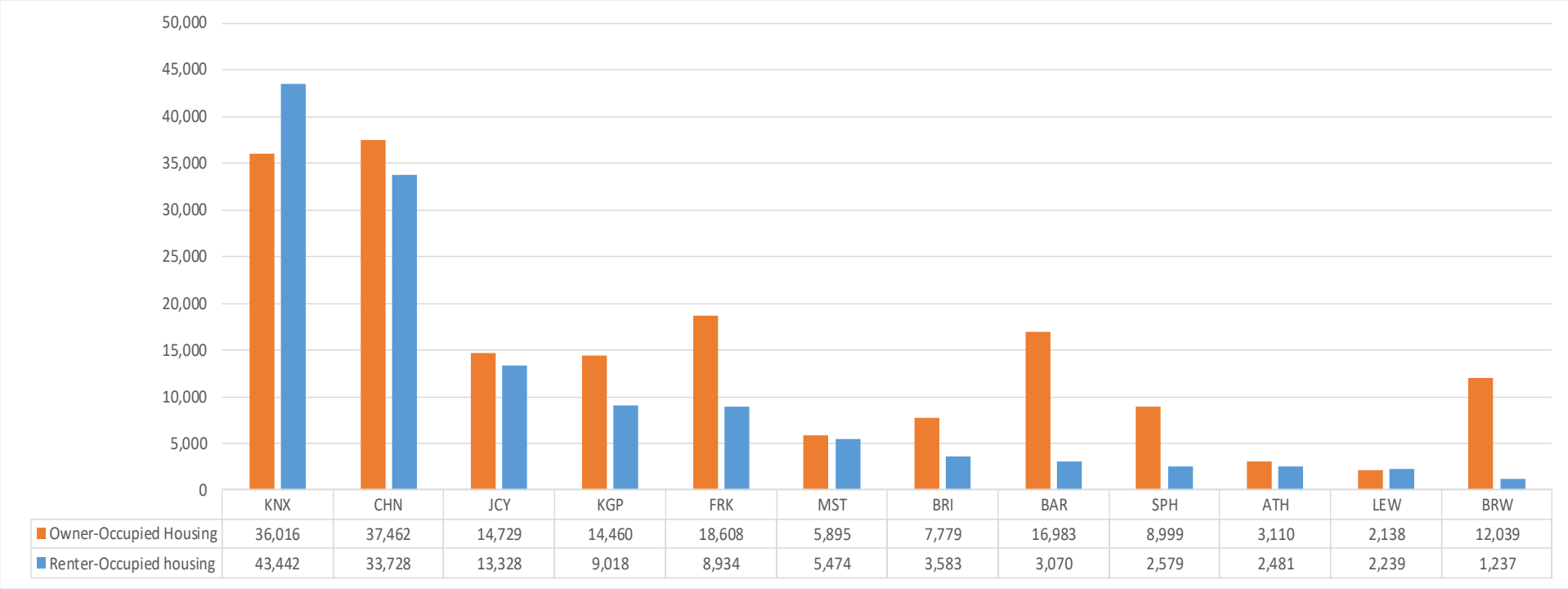
	MST	KNX	ATH	JCY	LEW	CHN	KGP	BRI	State	FRK	BAR	SPH	BRW
Poverty Status	26.9%	26.5%	26.3%	22.3%	20.8%	20.7%	20.0%	16.7%	15.0%	7.0%	6.7%	3.1%	2.9%

Following the Office of Management and Budget's (OMB) Statistical Policy Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using the Consumer Price Index (CPI-U). The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps). — U.S. Census Bureau

Detailed threshold data is available from MTAS or on the Census Bureau website (search “poverty thresholds”).

Source: U.S. Census Bureau. 2013-2017 American Community Survey 5-Year Estimates.

Renter-Occupied vs Owner-Occupied Properties, 2017



	KNX	CHN	JCY	KGP	FRK	MST	BRI	BAR	SPH	ATH	LEW	BRW
Owner-Occupied Housing	36,016	37,462	14,729	14,460	18,608	5,895	7,779	16,983	8,999	3,110	2,138	12,039
Renter-Occupied housing	43,442	33,728	13,328	9,018	8,934	5,474	3,583	3,070	2,579	2,481	2,239	1,237

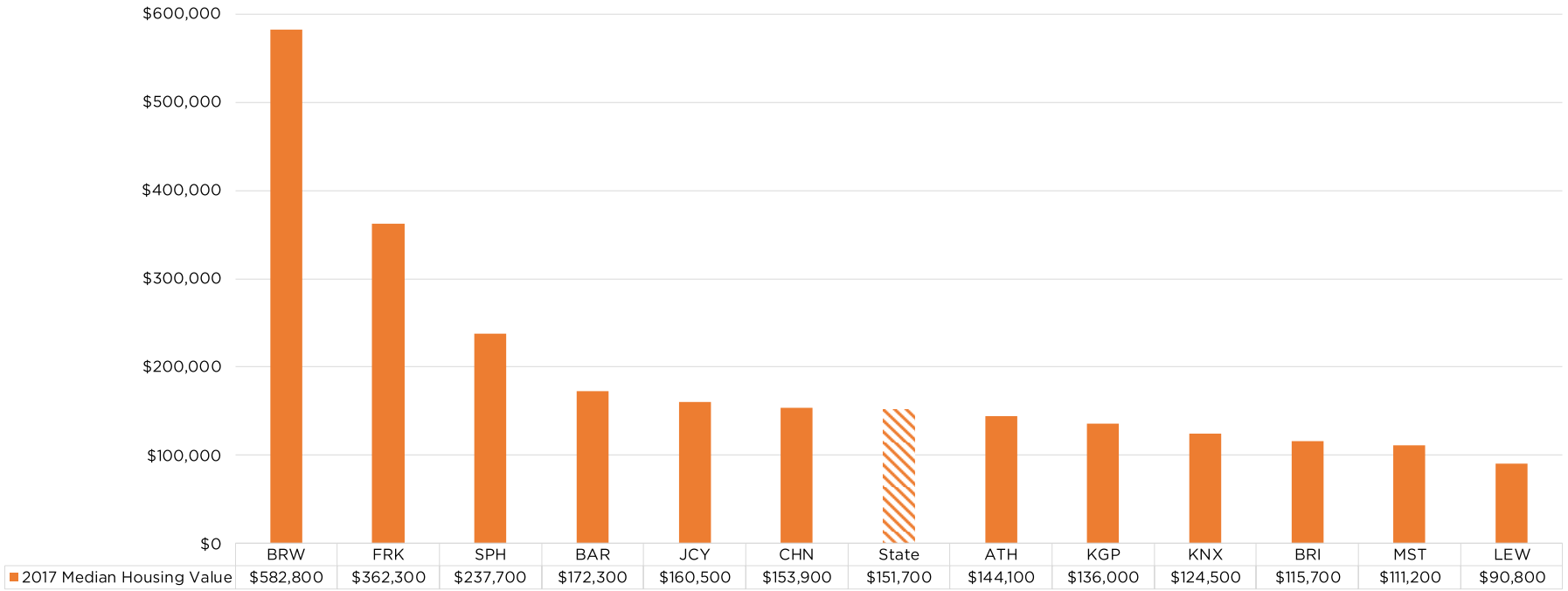
State: Owner-Occupied Housing = 4,338,361

Renter-Occupied Housing = 2,105,024

Source: U.S. Census Bureau. 2013-2017 American Community Survey 5-Year Estimates.

Appendix A. Member Demographic Charts

Median Housing Values, 2017



	BRW	FRK	SPH	BAR	JCY	CHN	State	ATH	KGP	KNX	BRI	MST	LEW
2017 Median Housing Value	$582,800	$362,300	$237,700	$172,300	$160,500	$153,900	$151,700	$144,100	$136,000	$124,500	$115,700	$111,200	$90,800

Source: U.S. Census Bureau. 2013-2017 American Community Survey 5-Year Estimates.

Appendix B. Participation History Through Calendar Year 2018

City	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Athens				X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bartlett		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brentwood	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bristol					X												X
Chattanooga	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Clarksville	X	X	X	X	X	X	X	X	X								
Cleveland	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Collierville		X	X	X	X	X	X	X	X	X	X	X					
Covington													X				
Crossville													X	X	X		
Franklin				X	X	X	X	X	X	X	X	X	X	X	X	X	X
Germantown	X	X								X	X						
Goodlettsville											X	X	X	X			
Greeneville											X	X	X				
Jackson	X	X					X	X									
Johnson City															X	X	X
Kingsport	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X
Knoxville		X									X	X	X	X	X	X	X
Lakeland											X	X					
Lewisburg															X	X	X
Martin												X					
Maryville	X	X	X	X	X		X										
Morristown										X	X	X	X	X	X	X	X
Murfreesboro				X	X	X	X					X	X				
Oak Ridge	X	X	X				X										
Paris												X	X	X			
Red Bank													X	X	X	X	
Sevierville												X	X	X	X	X	
Spring Hill												X	X			X	X
Springfield												X	X	X	X		
Tullahoma												X	X	X	X	X	

The Tennessee Municipal Benchmarking Project is a service of the

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